

"A very practical guide to success in business."

DR. DON NORMAN DIRECTOR OF THE DESIGNLAB, UC SAN DIEGO | AUTHOR OF *THE DESIGN OF EVERYDAY THINGS*

# THINK FIRST

MY NO-NONSENSE APPROACH TO CREATING  
SUCCESSFUL PRODUCTS, POWERFUL USER  
EXPERIENCES + VERY HAPPY CUSTOMERS

## JOE NATOLI

UX CONSULTANT TO THE FORTUNE 100



# PRAISE FOR JOE NATOLI

“A very practical guide to success in business.”

## DR. DON NORMAN

DIRECTOR OF THE DESIGNLAB, UC SAN DIEGO  
NIELSEN NORMAN GROUP  
BESTSELLING AUTHOR OF *THE DESIGN OF EVERYDAY THINGS*

---

“For designers and developers working on any interactive project, understanding strategy and user experience is an increasingly necessary skill. Joe Natoli’s *Think First* demystifies these foundational ideas and, like any good user experience, is written in a very conversational, easy to read style. Highly recommended!”

## ILISE BENUN

FOUNDER OF MARKETING-MENTOR.COM  
AUTHOR OF 7+ BOOKS

---

“*Think First* is a practical guide to UX that makes sense of strategy and structure. Highly recommended!”

## PETER MORVILLE

PRESIDENT, SEMANTIC STUDIOS  
AUTHOR OF *INTERTWINGLED: INFORMATION CHANGES EVERYTHING*

“**Nailed it!** In the vein of *Rework* by Jason Fried, *Think First* is an insightful, iconoclastic handbook. It unrelentingly strips down aspects of software design to the brass tacks. Joe must possess some magical nutri-design juicer which he’s used to extract the nutrients of dozens and dozens of textbooks, websites, references and experience and is providing it to us in a

single, filled-to-the-rim shot glass of realistic scenarios, approaches and tools.

Too often we focus on the user interface design or technology aspects, but in this book Joe pulls us by the ear and points our noses at ‘can you articulate the goal, and *what is its value?*’ Tape the pages of this book to your wall as a daily reminder.”

## JONATHAN COOK

ASSISTANT VICE PRESIDENT OF ENTERPRISE  
INFORMATION TECHNOLOGY & ARCHITECTURE,  
NATIONAL COMMITTEE FOR QUALITY ASSURANCE (NCQA)

---

**“Joe fundamentally changed the way we approach design.** With a new focus on the underlying design principles, we are able to make decisions grounded in fact, not opinions. We now understand the subtle changes that transform a good design into a *great* design. The practices we now employ are improving every step of our development practice; from prototype to final product.

Joe’s influence is evident in all of our work.”

## PATRICK TOOHEY

SENIOR SOFTWARE ENGINEER, METTLER-TOLEDO

**“Joe has always been a step ahead of me, offering expert advice and producing results that one can only *hope* for.** He has always been the consummate professional — 5-stars, in every way, every form, every month. Joe is a hard-working problem solver of the first order, and I’d give him a 5-star recommendation to *anyone*, anytime.”

## MARYELLEN MOONEY

CREATIVE PROMOTIONS DIRECTOR, BON APPÉTIT MAGAZINE

---

**“Joe effectively and uniquely brings the two worlds of IT and Design (sometimes at odds) together** in order to develop a product or system that works for both the business *and* the customer. Joe is intelligent, insightful, innovative and extremely talented. His experience and reputation precede him.

Expect *results*.”

## MIKE MATTHEWS

CREATIVE DIRECTOR, BROADRIDGE

---

**“What you’ve put together is pure excellence.** I’m new to UX Design and have already learned essential advice, principles and methods that I can apply to our product. I hope to share this new knowledge with my team in hopes to get our product and features to the high quality we’ve been reaching for.”

## RYAN SAMSON

STUDENT, *UXD FUNDAMENTALS* COURSE

**“Incredible.** Joe’s class is really impressive and really helps me reflect [ on improving ] my work. I feel like I’m learning more in this course than in *all* the time I spent in college!”

## PAOLO ORIONE

STUDENT, *UXD FUNDAMENTALS* COURSE

---

**“Greatest UX course I have ever taken.** Joe’s numerous real-world examples provide an in-depth understanding of UX. Whether you’re a developer or designer, this course will show you what UX *really* is.”

## CATHY FANG

STUDENT, UXD FUNDAMENTALS COURSE

---

**“Great knowledge and insight!** Joe walks you through the course with ease, playfulness, humor, and great insight. With conversation-like ease, Joe exposes insights that you may have never thought of, reasoning behind each, and clear solutions. This course has so many transferable qualities; you will benefit, regardless of the type of design your career path follows.”

## CHITA HUNTER

STUDENT, UXD FUNDAMENTALS COURSE

---

**“I found that my knowledge of user experience design didn’t even *scratch the surface of what Joe covers.*** I now realize the importance and necessity of knowing and understanding each element of User Experience — and how each element is essential to the overall quality and success of your site or app.

This is thorough training that you will only get from someone that has years of experience. I guarantee you will *never* look at user experience design the same.”

## CAROL

STUDENT, UXD FUNDAMENTALS COURSE

---

**“Mr. Fred Rogers said in an interview ‘The best teacher in the world is somebody who loves what he or she does and just loves it in front of you.’** Going through this course, I was reminded of this phrase over and over again. Joe clearly loves what he does, and he inspired me to love UX too! The course material is extremely well thought out, and it is delivered with a contagious joy. Wonderful experience.”

**PETER DAMOC**

STUDENT, *UXD FUNDAMENTALS* COURSE



Except where other works are noted within, this book is © 2015 by Joe Natoli, under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Photography by Jarred Sleeth.

**ISBN 978-0-9863448-1-7**

Published in Baltimore, Maryland, USA by Twofold LLC.  
Give Good UX is a registered trademark of Twofold LLC.

This edition distributed by UX Mastery (**uxmastery.com**) under license with the author.

Twofold/Give Good UX titles may be purchased in bulk for educational, business, fund-raising, or sales promotional use.

For more information, please email **books@givegoodux.com**.

# THINK FIRST

---

MY NO-NONSENSE APPROACH TO CREATING  
SUCCESSFUL PRODUCTS, POWERFUL USER  
EXPERIENCES + VERY HAPPY CUSTOMERS

---

JOE NATOLI

UX CONSULTANT TO THE FORTUNE 100



# DEDICATION

for Eli, who has *always* believed.

# SPECIAL THANKS

This is often said, but bears repeating here because it's true: this book would absolutely, positively *not* have been possible were it not for the following people.

**My wife Eli**, for the question that started it all: “why don’t you write a book?” Your seemingly endless supply of patience, support, encouragement and clear-eyed advice is nothing short of astonishing. To have you as a partner in every aspect of life is more than I could ever dare to hope for; I love you more than I can ever possibly explain.

**My children, Julianna, Sabah and Sophia**, who continue to teach me some of life’s most challenging, most enduring and definitely most *valuable* lessons. I love you all very, very much.

**Brad Kell**, for countless hours of editing and proofreading, always pushing me to make things clearer, crisper and simpler. I am forever grateful for your herculean effort and your friendship.

**Joe and Eva Barsin**, along with **Gerry and Aimee Bracken**, who have always been the first in line to get behind anything I’m doing. Your support, your encouragement and most of all your friendship mean the world to me.

**Mike Matthews**, for picking me up more times than I care to admit and insisting the way forward was possible. For always making yourself available over the last 20+ years, to offer guidance and wisdom, and sometimes just a friendly ear. You have given me much more than I can ever repay, and I am deeply honored to call you

friend.

**David Flynn**, for showing the ropes to a young punk fresh out of design school with a degree of patience, kindness and respect that made all the difference — and still does. I will never forget.

**Katie Kennedy** for lighting a raging fire inside me for design on my *very first day* of college at Kent State University. That flame is the source of everything I have ever done, and its value is immeasurable. You taught me by example the passion necessary to keep it burning, and I am ever grateful.

**John Buchanan and J. Charles Walker** for firmly (and sometimes *forcibly*) instilling the conviction that great design is a whole lot more than what something looks like. Your approach, insight and guidance so many years ago continues to light the way in all that I do.

**To the following people who, either directly or indirectly, took the time to share their knowledge, insights and advice with me.** Your kindness, generosity and your incredible, inspiring work provided valuable lessons that last to this day:

Ilise Benun

David Collins

Art Chantry

Ken Davis

Sam Faccioben

Jason Fried

Seth Godin

Ed Gold

Kim Goodwin

Lee Goske

Whitney Hess

Michael Hyatt

Guy Kawasaki

Katie Kennedy

Karen Kennedy

Teresa Kiplinger

Steve Krug

Clement Mok

Peter Morville

Dr. Don Norman

Paul Potter

Paul Sahre

Bryan Scheer

Nathan Shedroff

Matt Simpson

David Stallsmith

Kathleen Thompson

Joe Wagner

Eliot Wagonheim

Dr. Susan Weinschenk

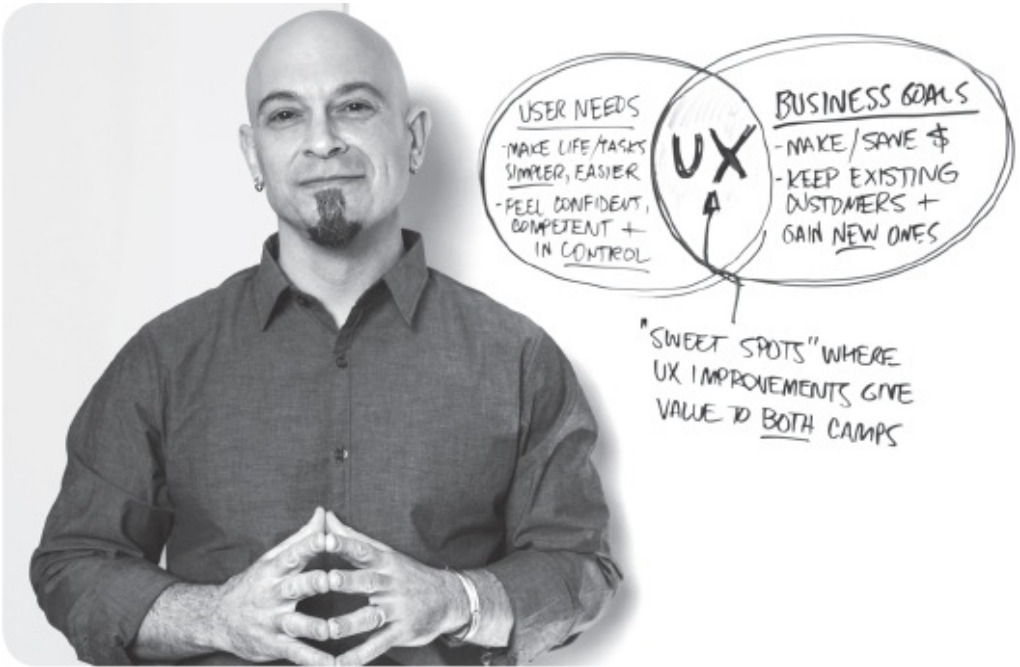
Sam Zappas

**I owe a great debt of gratitude to my parents, Richard and Donna Natoli.** You instilled a belief in me that anything was possible with perseverance and led by example. I love you both.

**Finally, to all the incredible people in all of the organizations I've worked with for two and a half decades:** I have learned as much from you as you hopefully did from me.

It has been, and continues to be, my *honor* to work alongside you to help realize your dreams and goals.

# ABOUT THE AUTHOR



For 26 years, I have helped Fortune 100, 500 and Government organizations design and reimagine digital products to improve User Experience (UX). From strategy to features to functionality to User Interface (UI) design, I work alongside product design and development teams to help them find and remove UX-related obstacles. Which, quite conveniently, helps these organizations save or make money.

In addition, I coach and train designers and developers to deliver better experiences via online courses. I am honored to have helped more than **27,000 students** to date start a career in UX or transition from a related discipline.

Everything I have ever done has revolved around a core principle: if you're in the business of creating digital products, **those products serve as your**

## **ambassadors.**

As such, user trust and customer loyalty depend wholly on the **experience** people have with those ambassadors. If the product is hard to use, people assume it's hard to do business with you. If the site sucks, *you suck*. If the system is slow and unresponsive, *so are you*. If the app is confusing and frustrating, they're frustrated with *you too*.

Products are used by *people*, after all, so putting people and their experiences first is a pretty good place to start.

At the same time, **creation always entails cost**: time, effort, money. And every creator is looking for a way to cover that cost, along with a little extra. In order to do that, you need to design and deliver **superior product experiences** — consistently, repeatedly, over time.

In order to do *that*, you need to uncover the sweet spots between **what users expect** from the product and what the **business needs** to accomplish in order to survive and prosper.

**These are strategic concerns, not tactical ones.** In these scenarios the greatest tool any consultant, manager, designer or developer has is what's between his or her ears.

The *thinking* part of design and UX is the most valuable part. That's what this book is about. That's what creates the **value loop** I talk about so often, where value goes out to users, and in doing so comes back to the business as well.

There are no shortcuts to great experiences. There is only the discipline to investigate, the patience to analyze, the willingness to be wrong and a mind open enough (and *brave* enough) to admit it. *Think First* is my roadmap for practicing and applying that philosophy.



# JOIN YOUR COMMUNITY

**UX Mastery is the proud distributor of the ebook you're holding in your digital hands.**

We believe Joe Natoli is an author you need to hear and learn from. His advice strengthens our conviction that people are more important than technology—the reason we choose to work in the user experience field and why we want to help you do the same. Together we'll rid the world of confusing, hard-to-use interactions and interfaces.

UX Mastery is a community that points you towards the best UX resources. We write articles, ebooks and newsletters. We host podcasts and sessions with leading experts (including Joe!), and we teach both in-person and online workshops that are fun, practical, and highly regarded by industry.

Join your community to get started and get better at UX:

- Online: [uxmastery.com](http://uxmastery.com)
- Forums: [community.uxmastery.com](http://community.uxmastery.com)
- Twitter: [@uxmastery](https://twitter.com/uxmastery)
- Facebook: [facebook.com/uxmastery](https://facebook.com/uxmastery)



INTRODUCTION

## **What's Your Problem?**

CHAPTER 1

## **There's No Success Without Strategy**

Fail to Plan = Plan to Fail

Strategy Starts with Research

There's More Than One Way

Start with Stakeholders

Next, Move to Users

Walking the Walk

Strategy, Simplicity and Success

CHAPTER 2

## **Identifying Business Goals**

UX Means *Business*

Conducting Stakeholder Interviews

Asking the Right Questions

Addressing the Competition

Evaluating Answers (When to Keep Asking Questions)

CHAPTER 3

## **Identifying User Needs**

Identifying Business-to-Business (B2B) User Needs

Asking the Right Questions

Identifying Business-to-Consumer (B2C) User Needs

Asking the Right Questions

Questions Specific to Redesign Projects

CHAPTER 4

## **Three Critical Questions You Must Ask**

One: What's Worth Doing?

Two: What Are We Creating?

Three: What Value Does it Deliver?

The High Cost of Misunderstanding

CHAPTER 5

## **Turning Strategy Into Scope**

Avoiding the Neverending Project

Scope Tradeoffs

Avoiding Perpetual Beta

Know What You're Building (and What You're Not)

Scope Creep: Just Say No

## CHAPTER 6

# **Strategic Tradeoffs & Product Evolution**

Tradeoff Case Study: IKEA

Product Evolution: the Long WOW

Anatomy of a Long WOW Experience

Motivation and Mastery

Repeated, Recognized Reward

What "Fun" Really Means

Planning a Long WOW Experience

## CHAPTER 7

# **Requirements: There's a Better Way**

What People *Say* They Need

What People *Actually* Need

What People *Don't Know* They Need

Creating Useful Requirements with Use Scenarios

What About Use Cases and User Stories?

Looking Beyond Tasks and Activities

Making Use Scenarios Contextual with Personas

Persona Creation Happens Immediately

The *Empathy Mapping* Template

The *Situation Mapping* Template

When You Finish: Questions to Ask

## CHAPTER 8

# Putting It All Together

*Think First* Takeaways

Now It's Your Turn

## RESOURCES

# Without Whom...

# **What's Your Problem?**

HIGH OR LOW / TRENDS!

- DOES NECESSARY LEVEL OF NONADDDING/SUPERVISION LINE UP W/ PROCESS/TIME BEHW?

COMMITTED

# OF PROSPECTS	AGENT PROCESS → T
	6 mos. - SELL WHAT CE
	6-18 mo. - SELL WHAT CLIENTS' NEED
	2-3 yrs. - MARKET +
	3-5 yrs. - BUILD A BU

CONSUMERS | GEN X + Y:  $\frac{1}{3}$  OF U.S. P  
BOOMERS:  $\frac{1}{4}$  OF U.S. P

UMRA  
OWNERSHIP STUDY - 50% OF GEN X/Y-HEADED HOUSEHOLDS DO NOT HAVE LIFE INSURANCE

\* RESEARCH + QUAL DON'T PURCHASE

GET BACKGROUND  
↓  
INCREASE KNOWLEDGE  
↓  
LEARN QUESTIONS TO

SOCIAL MEDIA LINKING STRATEGY

LINKS

FACEBOOK | TWITTER | SLIDESHARE\*

## The start of any project is where the greatest risk lives.

Essentially, you're starting from the darkest depths of the ocean. And we're not talking about the ocean *floor* — no, you're down in one of those caverns where the only life consists of those weird creatures that glow. And it is a long, *long* way to the surface.

If this sounds like a big task, that's because it most certainly is. But if you look at all the individual parts of any design process, and if you understand how they affect each other, it becomes a lot easier to tackle. And if you devote significant time and attention to the very first order of business — your **strategy** — the foundation you build will be strong enough to withstand any weather as you move into design and coding.

**Anything that was ever worth doing started with a strategy.** An inspiration, a motivation, a goal. If you have a strategy, that means you know what you're doing, who you're doing it for and why it matters — both to you and the people you expect to use the end result. It means you have a solid understanding of:

- (a) what **users** expect to accomplish with what you're building, and
- (b) what **you** expect to accomplish with it.

Both of these things will inform every single decision that must be made going forward. Every feature, every function, every label, every interaction and every single element that winds up on the screen will be a direct result of these two interrelated goals. So every project should start with strategy, and strategy starts with asking a very simple question:



## Why Are We Doing This?

I realize that question may seem painfully obvious to you.

After all, why would anyone commit massive amounts of time, energy, resources and money to something without considering the reason for doing any of it? Or at least stopping to make sure it was the *right* reason?

Well, I don't know the answer to those questions.

But I *will* tell you that I have twenty-six years and hundreds of instances where a whole lot of blood, sweat and (mostly) tears were shed without anyone stopping to consider **why**. Without anyone stopping to look before they leapt. Without anyone stopping to **think**.

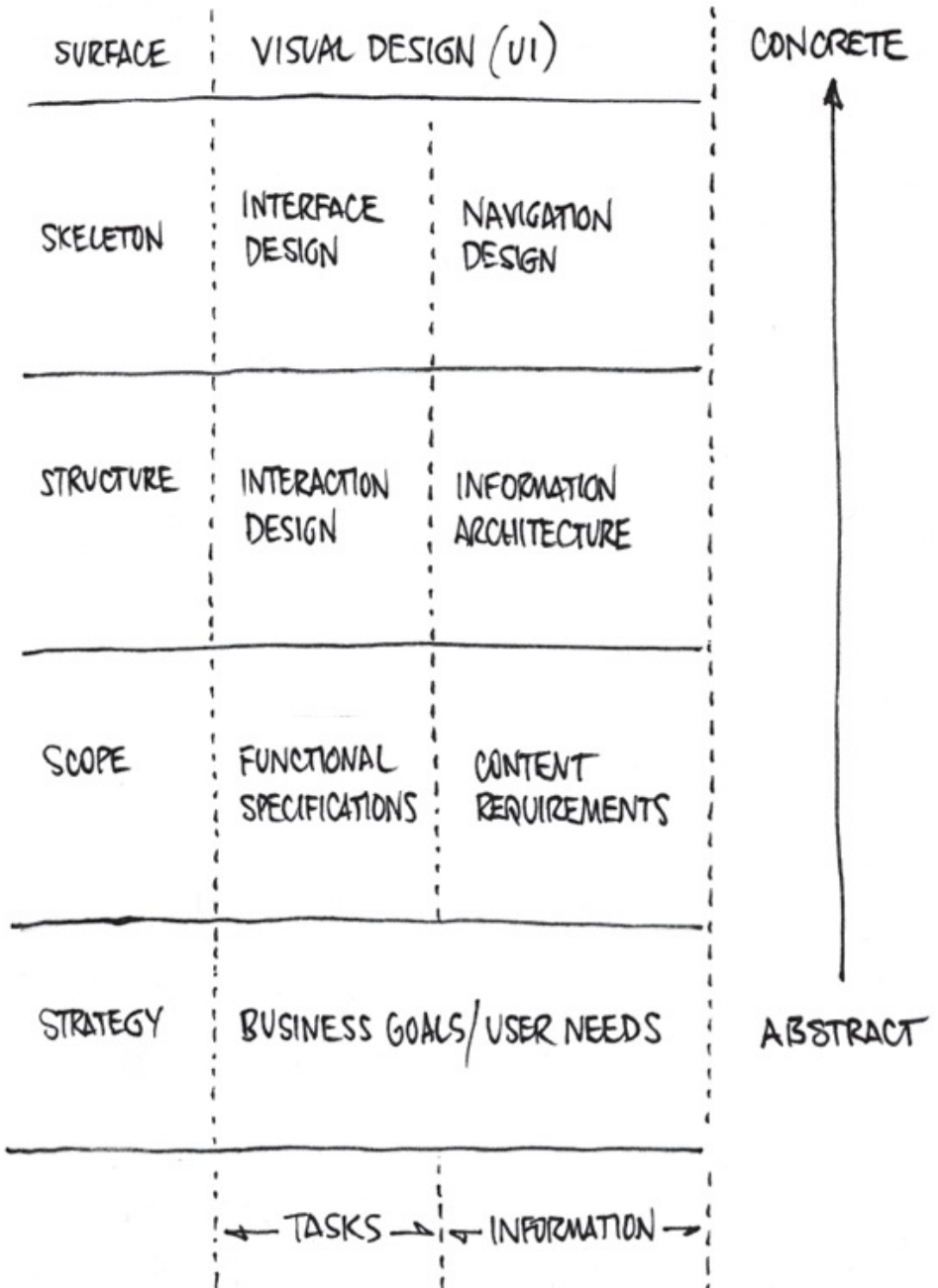
Now you're obviously pretty sharp, having picked up this book, so I doubt that I need to tell you how those ventures turned out.

Here's something you absolutely must remember: **If you fail to think first, then you fail, period.** If you fail to consider the almighty *why* with adequate effort, depth or rigor, you will miss something. And that something will sneak up and break you later. It will be expensive, and it will *hurt*.

When a product fails — from industrial products to websites, systems and apps — the reason is almost *never* technology. And to be honest with you, it's not always user experience either.

What really causes most things to fail is because nobody asked, or spent enough time validating the answer to, the question on the preceding page:

*Why are we doing this?*



## A Quick Primer: The Elements of User Experience

Back in 2002, a very wise man by the name of Jesse James Garrett wrote a book called *The Elements of User Experience*. Jesse, in the opinion of most, was the first person to accurately describe and give a name to what we now know to be UX. He's the Alan Freed\* of technology, as far as I'm concerned.

Jesse's book is widely regarded as *the* big-picture book on the subject, and with very good reason. It's clear, concise and easily understandable. It also goes a long way in deconstructing UX as a practice. So we're going to start there.

### The Five Planes of User Experience

The central tenet of *The Elements of User Experience* is that there are five "planes" of UX, five parts of making sure that no aspect of someone's experience with a digital product happens without explicit intent.

That means you've taken into account every possibility in terms of the intended user's motivations, expectations, environment and possible actions. You've researched, tested and analyzed to figure out what they want, what they need and what they'll be willing to *use*.

What's more, you're making **informed decisions** at every step of the design process that significantly impact what you do in the next step. And you're working in a way where you are acutely aware of how decisions at any given point in the process affect the options you may or may not have in other areas. Not the least of which are the end product's quality, feasibility and viability.

The first plane, the place you start (and the subject of this book) is the **Strategy** plane. UX starts with the product's reason for existing in the first place. Why you created it, who it's for and what it's supposed to accomplish —

for both user and creator.

The second plane is **Scope**, and it contains the features and the functions that make up the product itself.

Next up is **Structure**, which is essentially the number of places that you can go, organized by context of use. What is the person there to achieve? What are they trying to do? What are the possible paths they could take? How many do they *expect*?

Move up a level and you have the **Skeleton** plane. Here we have an optimized organization and arrangement of all the elements that make up what happens on the screen. Navigation elements, content, controls. Things you can read, things you can act on. The skeleton plane is the place where we figure out how all those things work together — not just on a single screen, but across the entire system of screens.

Finally, we get to the **Surface**, which is essentially the part that the user sees. Now we have a visual representation of everything within our reach, and visible ways to interact with what we see. At this level graphics, images and visual cues work together to deliver content and enable interactivity.

### **The Elements are Intimately Interrelated.**

The five planes build upon each other, from a strategic point where we start thinking about the *what*, *why* and *who*, all the way up to the surface of the screen, where we've built something people can actually see and interact with.

Each plane is split down the middle into two very distinct categories, as shown in the diagram on page 5. These categories reflect the nature of web-based sites, software and applications, and digital product technology as a whole.

On one hand, you have **task-oriented concerns**: technology platforms, data, programming languages, logic and an interface that enables people to do things. On this side of the fence we want to know what people expect to be

able to do with our product. We're interested in how will they accomplish task A, B or C:

- ➔ How do they move through information?
- ➔ How do they get to the things that they need?
- ➔ What are the ways in which they can read, write or otherwise manipulate data?

On the other side of the split are **information-oriented concerns**:

- ➔ What information is being served up, and what makes it relevant or valuable or useful?
- ➔ How much data or content exists, and how is it organized and prioritized?
- ➔ How is it labeled, and do those labels make sense to users?
- ➔ What does it mean to the people who use it?

Good UX deals with both aspects, makes sure concerns on both sides are addressed. And when it doesn't, *things fall apart*.

The UX designer's job is not only to address information concerns and the related needs of users — it's also to insist on being very **selective** and **analytical** in designing task flows and functional elements that serve a greater goal.

And that greater goal is what I call the **value loop**: creating something that delivers value to users, so that value also comes back to the product's creator in the form of increased use, efficiency or good old fashioned dollars and

cents.

## Strategy Means Putting People *First*

Products are used by people, so putting users and their **needs** first is a pretty good place to start:

- ➔ What do they need to be able to do, and why do these things matter to them?
- ➔ What do they want from us, and how is that related to other goals they may have?
- ➔ How does using our product fit with other products they may be using?
- ➔ What do they expect, based on their experiences with similar (or even dissimilar) products?

These are all user-focused areas of inquiry.

People live on the other side of the fence as well, except they're funding the project. Which dictates that they're concerned with **business objectives**. Creation always entails cost — time, effort, money. And nearly every creator is looking for a way to *cover* that cost, along with a little extra.

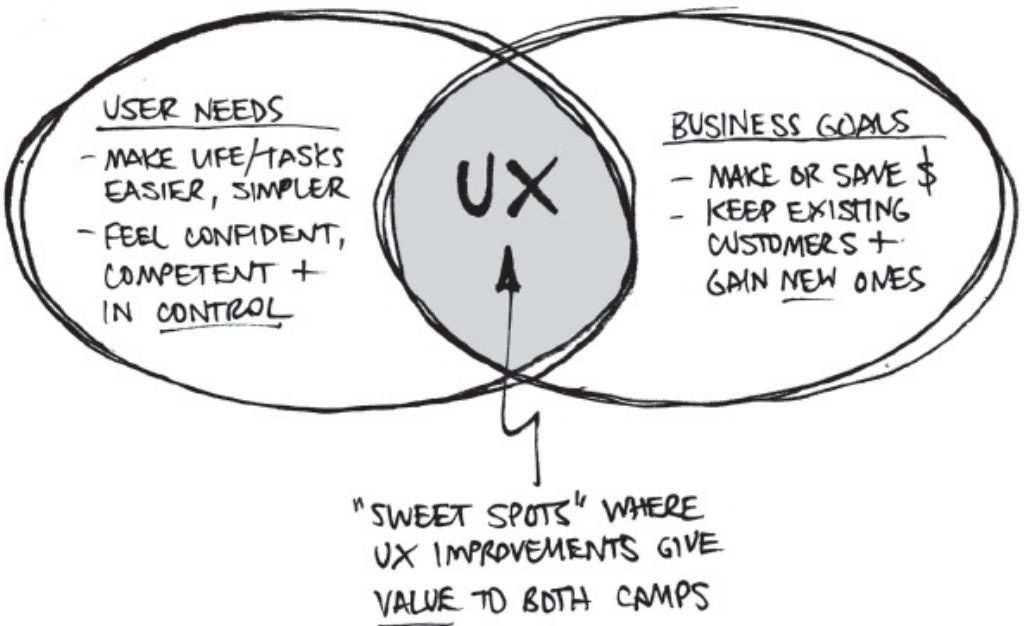
Even if you build apps for free, there is *something* you expect to get in return. That doesn't have to be money; it could be recognition or widespread adoption. It may simply be something that you truly feel good about because it helps people who are less fortunate. Whatever the case, there are objectives you have that need to be met, measures of success that *matter*.

If the business end of the equation is actually a business, then the objective,

at the end of the day, is either making money or saving money. There are one or more strategic objectives that have to be met as a result of building this thing and putting it out there into the world.

If you're responsible for helping make a product reality, then you're also responsible for uncovering **what those objectives are** and **why they matter**.

Strategy, then, is all about finding the **sweet spots** between what users want to make their lives easier and what the business needs to accomplish in order to survive, to prosper. It's about recognizing the gaps and the overlaps between those goals and thinking about how design can best serve both of these masters.



## Why the Strategy Plane Rules Them All

Again: the strategy plane is the origin of the **value loop**, the part that you absolutely, positively have to get right if you want the finished product to be around longer than ten minutes.

The strategy plane is where you *think first*: where you work to uncover and qualify user needs, where you ensure that you understand all relevant business objectives. It's where you begin planting seeds of product success — or failure.

Correctly identify and address these needs and objectives, and you deliver an experience that is the answer to someone's prayer. Guess wrong, or don't do enough digging, and you identify the *wrong* needs and objectives. Which turns the product into everyone's worst nightmare, including *yours*.

When it comes right down to it, design of any kind really means problem solving. Here's some advice given to me by a colleague many years ago that couldn't possibly be more true:

If you're a designer — experienced or fresh out of school — I want you to understand that **you will not find inspiration looking at the work of other designers.**

Let that sink in a minute.

I say again: you will *not* find inspiration. What you *will* find is someone else's solution to *someone else's problem*.

You're looking at the end result, not the process. And the **process**, my friends, is where the power of design really lies. The first thing you have to do, no matter what you're creating, is identify the problem — and then make sure it's actually the *right* problem to solve.

When I was in college, my professors drilled the following fact into our heads, over and over across our four years together:

**If you don't come up with a good *solution* to something, it's likely that you don't have a very good *problem*.**

That's a roundabout way of saying that the key to successful design is



identifying the **right problems** to solve. User experience design essentially explores feasible solutions to strategic design problems:

- ➔ What matters *most*?
- ➔ What issues have the most impact, the most measurable value?
- ➔ What can we do to address these issues, and do we have the time, money and personnel to take that action?
- ➔ Is it realistic that we can provide a solution to this particular, precise, complex problem?

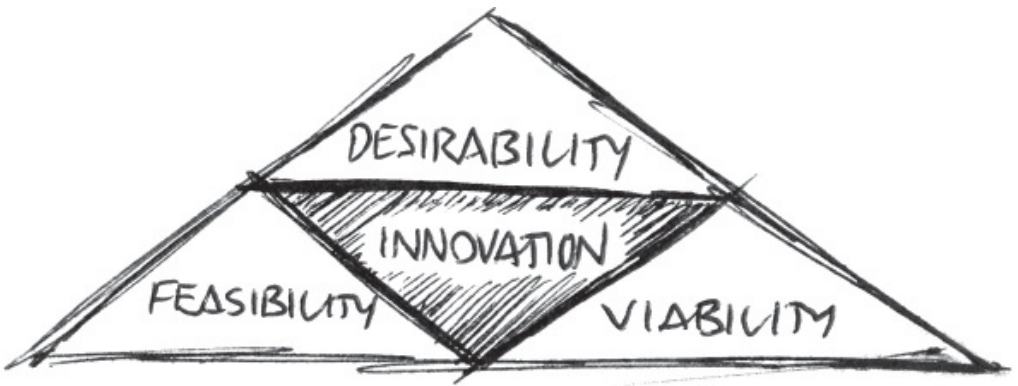
Anything involving human beings is inherently messy. We're interesting creatures. What we say doesn't always match what we do, and in general we can be very difficult to please. So any problems that involve our using something are typically difficult to solve.

And if they aren't, raise the red flag — because that's a sure sign you're on the wrong path.

## Innovation is a Balancing Act

**Innovation** occurs when tough problems are solved. For designers and developers, problem solving means uncovering the sweet spots mentioned on the previous pages. These are the places where you can do something that's unique, that's different and that really elevates the product above the competition. These are the intersections you need to seek out with a great deal of curiosity, effort and determination.

So innovation, then, lies at the crossroads of three very specific attributes: **desirability, feasibility and viability**.



Once again, you start with people, with **desirability**: you may well have a great idea, but does anybody *want* it? Answering that question is very often a highly iterative, unpredictable process. Partly because we're also trying to determine the **feasibility** of creating something that's really high quality:

- ➔ Can we create it?
- ➔ Can we implement it?
- ➔ What's realistic — what can we actually *do*?
- ➔ How great can we be within the confines of reality?

And if that weren't enough, we also have to consider the **viability** of the product once it launches:

- ➔ What's the *shelf life* of what we're designing?
- ➔ How soon before people will be expecting *Improvements*?
- ➔ How long can we *sustain* that pace?

This balancing act is every bit as challenging as it sounds. But time and effort devoted to strategy, to **thinking first**, allows us to take quantum leaps forward in creating apps, sites and systems that exceed the expectations of both users and creators.

Thinking first is what allows innovators of any kind to make their dreams and visions reality.

I wrote this book to show you *exactly* how to do that, from the ground up. No matter what your experience or level of formal training, by the time we're done you'll not only know to ask "*why are we doing this?*" — you'll know how to find the **answer**.

A handwritten signature in black ink, appearing to read 'Joe Natoli', with a large, sweeping initial 'J'.

**Joe Natoli | January 8, 2015**

\* *Radio DJ who coined the term "Rock & Roll" in 1945.*

# **There's No Success Without Strategy**



## Fail to Plan = Plan to Fail

Decisions that are made on the strategy plane, in particular, have a **massive ripple effect** all the way up the chain. If you screw up on the strategy plane, you'll be paying for it *repeatedly* over the life of the project.

## Stop me if you've heard this one before...

Let's say we have in-house UX, IT and Development teams working for a large financial services corporation, which we'll call Acme. Acme is a \$2 billion B-to-B enterprise serving 85% of the entire market of brokers, agents and resellers. These folks use the company's web services portal to deliver information and provide analysis tools to their clients.

Now assume that there's a specific **data reporting/analytics feature** the Acme CEO insists must be included. The data set is layered and extremely complex. The UX and IT folks research it and immediately realize they have to seriously re-adjust their design & build strategy. The database architects are raising massive red flags. Their report back essentially says:

*"There's no way we can build this within budget. It's too complex, it'll take five months longer than we have, there's no way we can ensure the accuracy of the data and it will only work with one of the major web browsers."*

And the Product Manager, VP of Product Development or the CEO, one way or another, says **"I don't care. It has to be in there. Internet Explorer (IE) only."**

The team begins building, but along the way they realize that they need six additional programmers to pull it off within the timeframe allotted. And not just any programmers, top-shelf, *paid-assassin* type programmers. And they need a CSS whiz who can style all this complex data to make it **understandable by**

**normal human beings**, because the out-of-the-box reporting module produces reports that even a PhD couldn't decipher. They put in a hire request.

## The plot thickens

The Acme CEO, and the executive team as a whole, says **NO. Work with what you've got.**

So the team does the only thing they *can* do, since it is physically impossible for them to bend the laws of time and space: **they cut corners**. Everywhere possible. And one of the first things that gets sacrificed is the time and budget allotted for **designing what the reports look like onscreen**.

Despite the corner-cutting, the project is three months late anyway (which everyone on the team knew and said it would be). Customers are getting antsy waiting for this big promised improvement and are beginning to seriously doubt the company's ability to pull it off.

Fast-forward to launch: the product releases, and customers begin using it. And they are immediately, unanimously angry about several things:

- 1. They don't know what they're looking at, what it means or how to act on it.** The data presentation is so complex that they can't understand any of it, much less use it as a basis for critical decision-making.
- 2. It doesn't work in their browser.** In their businesses and with their end customers, the web browser used most is Firefox, followed closely by Google Chrome. Neither of which the reporting feature works properly in (as the team predicted).
- 3. The numbers don't always add up.** The calculations are often incorrect, and the degree of correctness varies based on the type of report pulled. This is *sensitive financial data*, in some cases representing *million-dollar investments*. You can imagine why this

is an issue.

This anger is so profuse and widespread that several of Acme's customers don't renew their contracts. That lost dollar amount is roughly equal to **34% of Acme's yearly revenue**, which, by the way, is measured in **billions**. With a *B*.

All of which makes what I said earlier well worth repeating, particularly for those of you who own businesses or are C-level decision makers:

**If you screw up on the Strategy Plane, you'll be paying for it repeatedly over the life of the project (and afterward as well).**

The scenario I've just given you isn't too far from hundreds of actual scenarios I've seen over the past two decades. I've had many a spirited discussion with Project Managers, Product Managers, VPs and CEOs over things they insist "just *have* to be done." And I've lost *plenty* of those battles, believe me.

At the end of the day, it's their decision, not mine. It's their money and market share to lose. The only thing I can do is say "here's how that's going to play out" and hope it's given some consideration. And that's all *you* can do as well, if your role is that of a doer instead of a decider.

But if you have a choice – if it's *your* app, *your* website, *your* system – the key to **less stress, less suffering** and a **user experience that makes or saves you money** starts with an "S."

I've been privileged to work with some very big, wildly successful organizations over almost three decades, and I can tell you that the one thing they all have in common is this:

**They spend a great deal of time, effort, resources and *money* on the Strategy Plane of UX.**

As I'm sure you realize from my relentless (bordering on obsessive)



hammering of this point in the intro, strategy has the most impact in terms of the success or failure of a product. As I illustrated, there's a ripple effect that happens from the strategy part of the project onward. If you know **what you're building**, if you know **who you're building it for**, and you know **why it's going to be valuable** to those folks (and conversely why it's going to be valuable to *you*), success shall be yours.

As you progress through each plane of UX — from Information Architecture to Interaction Design to User Interface Design — that success goes with you, strengthening your efforts.

However, if you fail to consider all the aspects of product strategy, business strategy and user needs, those miscalculations will *also* follow you through every step of the process. You will find yourself extremely stressed out and very, very frustrated.

What's more, you'll have created something that people will probably not find very useful.

So now that I'm sure you'll never, *ever* forget how intensely important strategy is, I'm going to talk a little about the creation and application of strategy.

## Strategy Starts with Research

All good strategy starts with research. Why? Because we don't know everything there is to know about any given problem, or industry, or product, or the people that we're hopefully trying to reach. No matter how long you may have worked in a particular industry or even for a particular client, I guarantee you there is, with every new project, a laundry list as long as your arm of very significant things that you *don't* know.

### Research Rule #1

As such, my first rule of research is this: **assume you know nothing**. Let go

of every preconception you have; they will only serve to alter your perception of what you're hearing. Objectivity is not impossible; it's actually little more than **learned behavior** that comes from discipline.

For example, even when a client is telling me something I think I already know, I never say "right, I'm aware of that." Instead, I assume there's some part of that story that hasn't been told yet. I assume that either (a) no one has asked them about these things or (b) no one shut their mouths long enough to actually listen to the whole story.

In addition, context changes constantly — especially after I've asked them a number of questions that almost always nudge them into thinking about things they haven't previously. So more often than not, those additional details come out when I remain patient and listen.

And those details are almost always *damn* important.

If I interrupt and indicate this was already covered, those additional details are *never spoken*. So follow rule number one and **assume you know nothing**.

## Research Rule #2

And if you ever find yourself doubting rule number one, remember rule number two:

**Shut up and listen.**

## There's More Than One Way

No matter how you go about getting the information and knowledge you don't currently possess, no matter the method or technique, it's **research**. If you are looking for clues into what needs to happen to solve a problem, you are researching. As such, you are now, in fact, a *researcher*.

My point here is that research does not have to be this massive, academic undertaking, where you're taking a very formal, scientific approach to measuring variables and conducting experiments. You do *not* have to subscribe to and practice any number of formalized approaches to UX, design or usability research. Those processes are all extremely relevant and infinitely valuable, but you do not have to have "research skills" in order to do this.

There's no ultimate, single way to do it "right." There are *multiple* ways, means and methods and they all have value. Don't restrict yourself. Be open to whatever means and methods help you meet the goals of the project and the client.

A great deal of user research, for example, starts with simple conversation or direct observation. Talking with your fellow human beings, watching them in action if/when possible and leveraging the tools in front of you. And don't forget one of the most overlooked tools you have: **Google search** (cue trumpets).

There's an awful lot of information to be found via our ubiquitous friend with the funny name. It's beyond easy to find useful (and often validated) information about any given topic, any given audience segment or any given product. In most situations, you will find that there are precedents you can check out and learn from: people looking for the same answers you are, and who have been kind enough to share what they've learned with the rest of us.

So research starts with asking a lot of questions and getting enough answers to either:

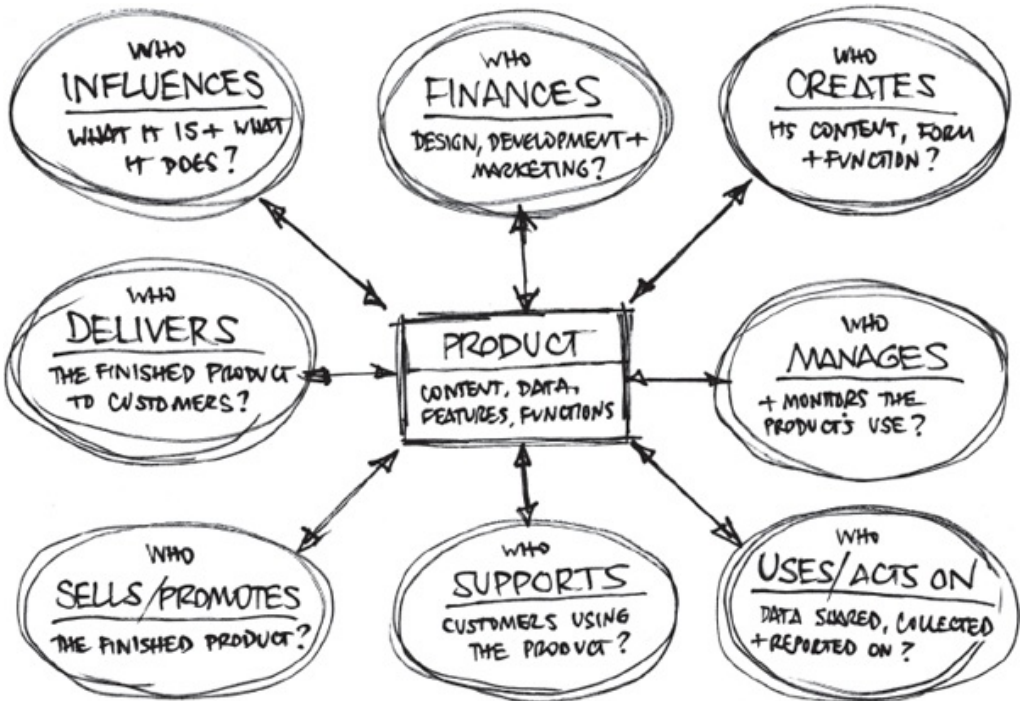
1. Confirm that your approach is **appropriate**,
2. Signal that you're on the **wrong path**, or
3. Suggest that you'll need to **do some additional digging** before you'll know for sure.

## **Start with Stakeholders**

The first part of strategic UX research is what we call stakeholder interviews. A stakeholder is any person that has a vested interest in both the product and the outcome.

The stakeholders I'm talking about live on the **business** side of the equation; these are the people who have the most to lose if the product tanks. Every stakeholder has a **specific area of responsibility** related to the product. You need to find out what those areas are and what inherent risks related to those responsibilities exist for each stakeholder.

You find out who those people are — and what exactly they have “at stake” — by answering the questions shown here:



If you're a designer or developer working on a project for a client, then the people that you're talking to might have roles like *Director of Marketing*, *Director of IT*, *Product* or *Project Manager*, etc. These people all have a

vested interest in whether this product succeeds or not, all the way up to the level of the CEO or President — the person who's signing the checks to get all of this work done!

These people are all assuming a great deal of **risk**, and as such, are naturally in a position where they can exert great influence over the project (and product). For that reason alone, they are the first group you want to talk to.

You want to know what's on their minds. You want to know what each of them *individually* thinks success is. What has to happen in order for each person to view the effort as successful? Do those definitions apply to more than one person/role? And if they don't, *should* they?

It's important to have these stakeholder conversations/interviews early on, and throughout the project. You want to find out what *everybody* is thinking. If there are differences of opinion about what constitutes success, get them ironed out *before* you start doing any work.

This is critically important. Otherwise you will go down one, two, six or eight paths, and the target will keep moving. You'll be stuck in a situation where nobody can agree on what you're supposed to be doing.

No matter how good you may be, you will find that the target moves **much faster** than you do. As such, you must:

- ➡ Talk to ***everyone who is in any way connected*** to what you're doing.
- ➡ Ask ***every question*** you can possibly think of.
- ➡ Do both of those things ***early*** and ***often***.

I'll detail what some of those questions should be, and how they relate to identifying business goals, on page 33. For now, keep all of this in mind.

## Next, Move to Users

After stakeholders, you start talking to users. You want to get a representative sample of folks together and ask them a lot of questions about what they like, what they don't like and what they typically do during the day. You want to know about their responsibilities, their critical tasks, their goals and their motivation for achieving those goals. You also want to understand the context of the environment they're operating in:

- ➔ If they work in a corporate office, **what policies, processes or procedures** affect how they do what they do?
- ➔ How often do they get **interrupted** during the day? By who, and for what reason?
- ➔ How much time do they spend **in meetings** instead of at their desks using their computer (or laptop or tablet)?

The point here is that their **environment** exerts just as much influence — on *what* they do, *why* they do it and *how* they do it — as their personal or professional motivations do.

And again, aside from just interviewing people one on one, the Internet is a treasure trove of information. Because whatever people like or don't like, they get on Facebook, or they get on Twitter, or on Amazon or wherever, and they tell you (and everyone else). And while at one point that public parade of feedback was limited to consumer products, you will now find an equally deep reserve dedicated to B2B products and systems. So even if you can't sit one-on-one with users, you *can* find them. The information is out there.

## Walking the walk

From there, it's all analysis and review. You've got answers to all the questions you've asked. You've got transcripts from multiple interesting and

illuminating conversations. You've got a ton of stuff that you researched and found online. Now it's time to *look* at all of it and try to figure out what it all means — and how it should inform your UX efforts.

Again, I have to stress that you don't have to use formal processes for doing this analysis. Do they help? Absolutely. If you have experience and tools and processes for formal analysis, by all means take that route. But if you don't, the process is called **read, re-read and take copious notes**.

Once you start reading back everything that you've gathered and collected and noted, you're going to see **patterns**. You'll come across multiple instances where people are *saying* the same thing, *asking* for the same thing, *complaining* about the same thing.

And that activity is what a fancy word like *analysis* really means: looking for patterns in the information you've collected. You want to make note of those things collectively so that they can inform a proposed feature set for the product.

Knowing the need allows you to hypothesize what could be designed to *fill* that need, solve that issue. This, in turn, helps define the scope of what you're doing.

## Strategy, Simplicity and Success

Success in the age we're living in — of relentless, widespread complexity — will only come from focusing on **strategic simplicity**. You have to figure out what matters most and strip away everything that doesn't serve that need.

Product success, for the most part, doesn't come from features, functions and underlying code. Widespread product adoption comes from the ways in which we *expose* those features and functions to people who might find them useful. Product sales skyrocket when the experience of use *exceeds* our expectation.

## Think First

You have to look *past* the hardware, past the languages and platforms and features and extensibility and data. That complexity is self-evident and it's here to stay. But users don't want to know about it. They **don't care** how robust or complex or difficult to control it is. They want simple, and it's entirely up to us as UX, design and technology professionals to make that happen.

The key to doing so, the tipping point, the ace in the deck, the silver bullet – call it whatever you want – is a relentless focus on answering people's need for simplicity in the user experience.

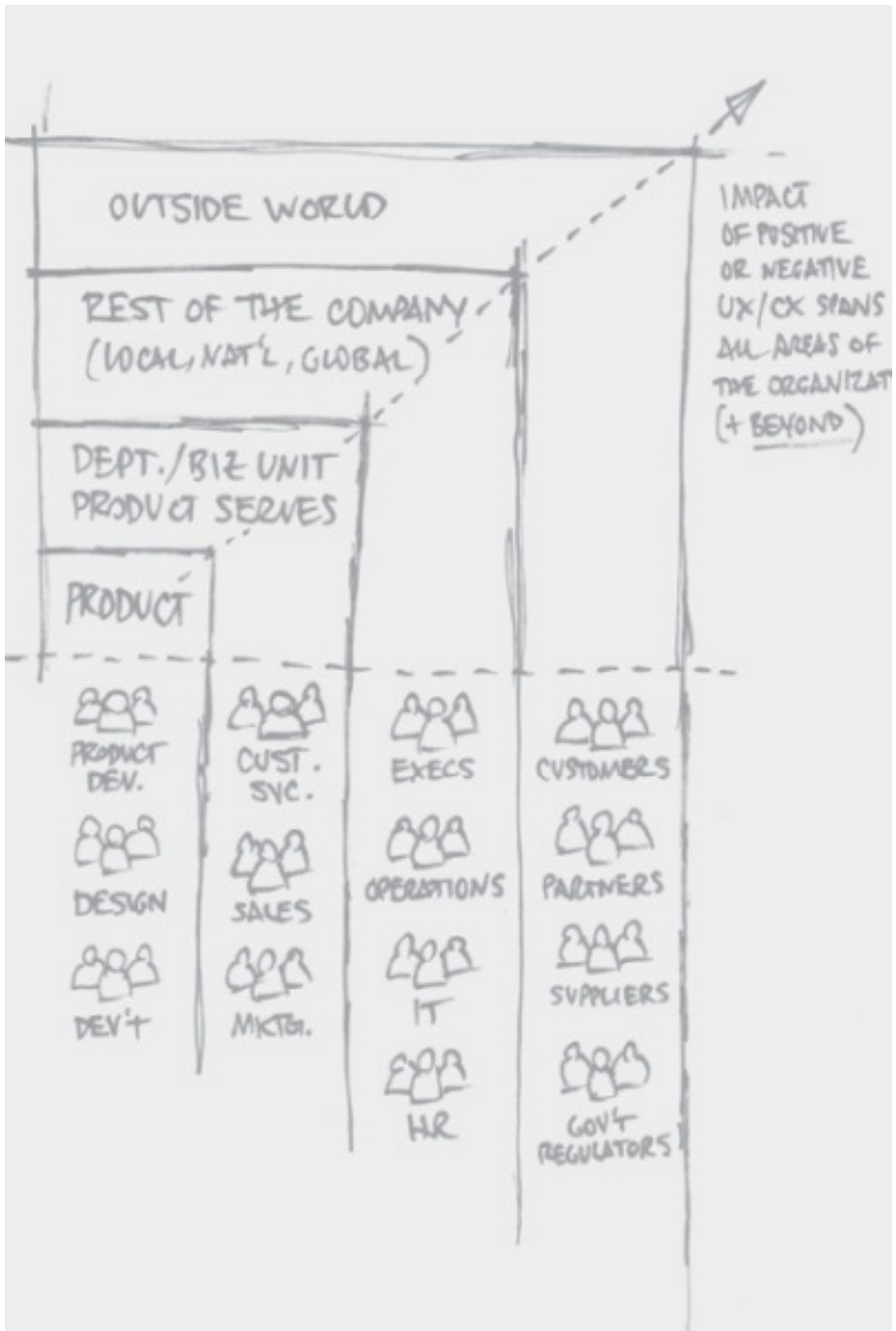
Why? Because more complexity under the hood demands more simplicity and ease of use in the driver's seat.

Do the research. Ask a *lot* of questions. Solve the *right* problems.

Research doesn't have to be complicated, and it doesn't matter so much how you go about collecting and analyzing data. It matters more that you take the time to **do it** – and that you steadfastly refuse to **skip it**.



# **Identifying Business Goals**



## UX Means *Business*

Before we dive into the details, I want to say this: the core concern of any commercial entity is money. And as such, every business goal relates back to doing one of two things:

1. ***Making*** money
2. ***Saving*** money

Do companies care about customers? Yes. Does this mean all businesses are essentially bloodthirsty vampires? No. Aren't we also here to make people's lives easier, to give them value and delight? Of course.

But right now we're talking about ***business goals***. And the bottom line is this:

**It is exceedingly difficult to stay in business if you are unable to effectively, continually make and/or save money.**

It just isn't any more complicated than that. Your primary job as a Designer, UXer or Developer is to help these people either make money or save it.

## Conducting Stakeholder Interviews

Business goals come primarily from the folks who are carrying the most *responsibility* and *risk* for the project's success: the ***stakeholders***. These are the folks we talked about in the preceding section. They are your project/product owners, your subject matter experts. They are the people who can explain to you what success means, both for the business and for them. Which means that in addition to wanting to know how a product redesign will affect the business, you also want to know how it's going to affect each of those people — and their departments if it's a large organization — individually. Think:

- ➡ Who has **decision-making authority** (and who doesn't)?
- ➡ Who has the most to **gain** or **lose**?
- ➡ What happens to each person's world if the project **succeeds**?
- ➡ What happens if it **fails**?

Always remember that success for one stakeholder **may not be the same as success for another**. And should those goals be diametrically opposed, you may find yourself caught in the middle of a political battle.

If that happens, you'll need to know how lightly to tread.

You also want to be able to recognize when you're **fighting a losing battle** that will only end in tragedy for all involved. I've been involved with a few of those projects. They last *forever* — and the mental and emotional stress lasts even longer.

So one of the first critical things you have to do is get the lay of the land; find out where each stakeholder is coming from and what they expect to happen.

## Asking the Right Questions

In some cases you will be in a room with a lot of sharp people who already know they need to give you a thorough tour of what they're doing and why. But in many cases, **you'll need to ask for details**. Because quite often, they may not understand **why** you need to know something. So unless you ask, they may never share some mission-critical knowledge.

The questions you ask, obviously, should be specific to the client's business model, market, product, industry, etc. But there are more than a handful of

questions that you should ask of **every business stakeholder, every time**. Here are the most important of those:

1. **Who are your customers or users?** You want to get to know the people that use this product or service *right now*. What do they do with the product? What do they like about it? What do they expect from it?

This is where, if possible, you want to involve folks who work in the call center or are directly responsible for interfacing with customers (e.g. sales people). You want to know what customers complain about and how often. And you also want to know if the organization can draw a straight line from any of those complaints to lost revenue, or to customers choosing a competitor.

You also want to know more about these people as individuals, about their responsibilities and motivations. You also want to get the business' take on the people that use their product. Coupled with user interviews, this will often reveal a gap the size of the Grand Canyon between what the business *thinks* customers do or want and what those customers *really* do or want.

2. **What business goal should the end product serve — what should it *do* for the business?** What needs to happen once we launch (or re-launch) this and people *use* it? How does each person in the room define success? How will each person (and their department) **measure** that success? The measurement part matters a great deal, because any goal that can't be measured is one that probably can't be **achieved**. And even if it can, no one will know when that's happened.

You want to know *why* the company is rolling out this new product or service, or why you're being asked to redesign what exists now. Those "whys" are business goals:

➔ Will the new features and functions **convince more**

**customers to pay** for the product/service?

- ➔ **Will it convince them to pay more than they're paying now**, or make a case for adding additional upgrades?
- ➔ Will a better product keep them from **switching to a competitor**?
- ➔ Is this product intended to **replace an existing, outdated legacy system** that's too expensive to maintain and riddled with inefficiency?

**3. What role does this product play in the company's overall business strategy?** No man is an island, and inside a business, no project is either. Among all the things the organization does, there will be multiple pieces that will impact what you're doing. You need to know what those things are so that they don't sneak up and derail you later.

In heavily regulated industries, for example, changes to the law can have a profound effect on how data is collected, accessed, manipulated and stored. Whatever you're proposing has to be in line with those external constraints. So you want to be sure you ask:

- ➔ Are there any **company-wide initiatives or mandates** that could affect this product in any way?
- ➔ Are there any **changes to current business processes** that dictate how the product will be managed from an administrative perspective?
- ➔ You want to know the flipside of that one as well: are

there any **planned features, functions or services** in the works that may force the company to modify — or even reinvent — **current processes** and procedures?

#### 4. **What technology is in place, and what related technology decisions have already been made?**

This is tremendously important, especially with established organizations who will typically have an IT department in charge of all of the technology decisions that get made. Those people must be at the table from day one.

For all you know, they may say, *“look, we don’t care what you build but it must work in a Microsoft IIS environment. We absolutely will not support PHP or any open source products or platforms.”*

**Security** plays a part here as well; every organization has different security requirements and many have a large investment in an established infrastructure. And no matter how brilliant you may be, *none of that* is changing for your project.

The existing parameters around technology have a profound impact in what you recommend, design and ultimately build. As such, make sure IT is present and accounted for, and **ask this question up front, every time**. Otherwise you may be in for a big surprise in 3 months, part of which includes a very angry client who was looking to **you** to figure out all this “techie” stuff.

#### 5. **Why do you think customers would use this specific product?**

An obvious question, to be sure. But believe it or not, in the mad rush of day-to-day pressures, tasks and activities inside a corporation, it’s not often that people step back to ask *“why do customers care about this?”*

The act of doing so often prompts people to re-examine their preconceptions. I’ve been in rooms where after 40 minutes of what sounded like a solid list of reasons, the conversation dissolves into

twelve people thinking *WOW...we thought we knew, but, er...ah... maybe we don't know.*

I also want you to notice how **open-ended** the question is. That's on purpose. You're purposely leaving a very large gap that the ensuing conversation will fill in.

And in most cases, some incredibly important things will come to light in that gap.

## Addressing the competition

Once you've spoken to stakeholders about their issues, opinions and business goals, it's time to direct your efforts toward the competition. Although much of the conversation up to this point will have referenced competitors, now is the time to address it explicitly and in detail. That means identifying competing products, services and companies.

Some of these will be **direct** competitors, meaning they offer the exact same set of products and services your client (or your business) does.

Others will be **indirect** competitors, meaning that they offer some of what your client or company offers, but there may be other offerings they have that you don't, or vice versa.

**If you ever hear the words “we have no competition,” that's your cue to exit.** Any and every organization has competition, direct or not. And no matter how new or unique a new business may be, you (and they) have to keep in mind that the world is a big place — and the Internet has given us access to every corner of it. Your competitors are at your doorstep. And even if they're not outside at the moment, I assure you they are en route.

If you know what the competition is doing well (and what they're *not*) it'll be easier to identify areas where competitive advantage can be created. Here are the most common, and most *important*, questions to ask about competitors.



**1. Who are your top five competitors?** As with the “no competition” clause above, anyone who can’t name five competitors is woefully misinformed. So press the issue, and encourage them to think about indirect competitors, Of those competitors, you want to know:

➔ How many have a legitimate shot at **stealing your current or potential customers**? Why?

➔ If someone really *can* steal your thunder, what do you think you need to do **to prevent that** from happening?

**2. What are the primary differences between your business model and theirs?** How do they make money, and how do *you* make money? The degree to which those methods are **alike** determine just how dangerous those competitors are. And how important your UX efforts will be. Because in a situation where companies are fighting for the *exact same customers* with the *exact same services*, **most traditional areas of differentiation will be of no use to you (or them).**

What typically happens is that organizations compete on things like price or feature set, because everything else is so similar. Problem is, neither approach really works. What I tell clients is this:

**In apples-to-apples competitive situations, the only thing that really determines who gets more customers is *how easy you make it for people to do business with you.***

The typical “we’re cheaper” approach goes right out the window if using your services involves multiple calls or chats with customer service, frequent browser errors, unintuitive labeling and a level of effort that demands a quarter of or more of someone’s workday.

**3. If people use a competitor's product instead of yours, what's the reason?** They may not *know* the exact reason. Or they may know and are uncomfortable talking about it. But nine times out of ten, I think you'll find that if a company is getting pounded by the competition, if it's rapidly losing market share, they know — or at least *suspect* — *why*.

It may be a very *difficult* why, but it's there. Otherwise you wouldn't be in the room in the first place. In terms of market share and revenue, you need to know whether they are:

- (a) Holding their own,
- (b) far ahead, or
- (c) **getting their asses kicked.**

Because if it turns out to be (c), you'll need to do some additional digging to make sure you understand why that's happening.

At this point in history, nearly every service in almost every industry is delivered via technology. And **when that technology is hard to use, people bail**. They will gladly pay another provider *more* if that product places less demand on their time or effort.

**4. What's your strategy in terms of positioning and differentiating this product?** Essentially what you're asking here is "*Why you?*" What's going to be different about this product, and will that difference be (a) **obvious** and (b) **meaningful** to customers? Specifically, you want to dig into what that difference really is:

- ➔ Is it a **massive, large-scale difference** that's obvious in three seconds, or is it only visible once you dive down into specs and details?

- ➔ What are the **core differences** between this product's feature set and that of the competition?
- ➔ **What's the one thing they're *not* giving customers that you can?** Or vice versa?

What you want to get a handle on is simple: **what are competitors doing, and is it working?** Do people like it? Do they hate it? Is the Internet chatter praising or complaining?

The complaint part is very valuable to you, by the way: if you can find examples of features and functions that people routinely complain about in the competition's products, those can often be areas you can capitalize on. You've got an opportunity to say to your users "***we know you hate this kind of thing, so we don't do that.***"

That's low-hanging fruit — an obvious opportunity for differentiation — and it should absolutely be part of your plan.

## Evaluating Answers (When to Keep Asking Questions)

You want **specific, measurable answers**, and you have to keep pressing until you get them. The measurable part is important here — because if you can't measure something, you probably can't achieve or manage it. Why? Because **you'll never know if you've *reached* it.**

Specific, measurable answers should sound something like this:

- ➔ "*We want to cut the time it takes customers to sign up by at least 30%.*"
- ➔ "*We want to cut the number of calls to our call center in half within six months.*"

➔ “We want to decrease our shopping cart abandonment to less than 3%.”

Those kinds of answers point to the places you need to begin looking at in order to understand the problem. The more specific the goal, the easier it is to figure out what kinds of things will contribute to reaching it.

Pushing for specific answers like these also goes a long way in avoiding an all-too-common situation where you’ve got a lot of people on a team and none of them see the project the same way. They have very *different* ideas about what success means, very different ideas about what needs to be done.

What’s more, **each person has very different motivations** for their perceived goal. Some of those motivations are personal, some are political, and some are directly related to the harsh reality of someone simply trying to hang on to his or her job. You want to uncover as much of that motivation as possible so that you can properly frame each person’s input.

A good friend of mine related a story awhile back that has always stuck with me. It’s a simple, understated exchange or words that on the surface may not seem like much. In reality, however, its the equivalent of an ear-splitting air raid siren, warning you that you are headed into dangerous territory. And it also suggests that there are more than a few questions to be answered. Here’s how the story goes:

**Years back, my colleague was partnering with an IT firm**, building a services portal for a large financial services client. The IT firm was handling all aspects of design & build; my friend was on board as a consultant. During that time they had dozens of conversations that went like this:

**CEO:** How long will it take you to make this feature list reality?

- PM:** This is a long, complex list. We need 14 months, at bare minimum. And to be honest, we're not convinced that our current server environment will support *half* of what's on this list.
- CEO:** WHAT!?! No. No way we can wait that long. This has to be live in *six months*.
- PM:** OK.

Some of you are shocked, and some of you are laughing knowingly. This happens more often than any of us would care to admit. The Project Manager immediately caved in to the CEO's demand, despite the fact that (a) the delivery date was **logistically impossible** and (b) **absolutely nothing** in that exchange of words made the CEO's deadline any more achievable.

When that deadline wasn't met, the project ended in disaster. The IT firm was subsequently fired, and the resulting bad blood was hard on everyone.

So when you're in this situation, in my colleague's shoes or the Project Manager's shoes — or just an observer — you want to push for a much more realistic approach and outcome. In other words, ask more questions, such as:

- ➡ **What is the worst thing that happens if we don't deliver by this date?** You're trying to find out whether the proposed schedule is actually driven by a specific event or consequence, instead of personal fear or desire. Or by the knee-jerk need to answer everything with "ASAP."
- ➡ **If the date can't move, which features & functions absolutely have to be in place by then?** More often than not, everyone will come to the realization that only *certain* things have to be accomplished in the initial time frame. And that having those features in place and working will buy the team more time for everything else.

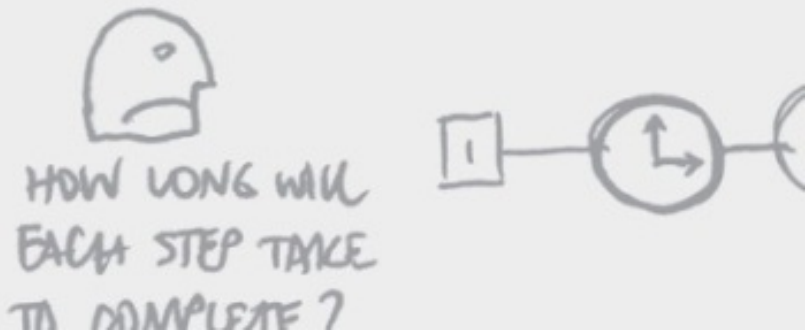
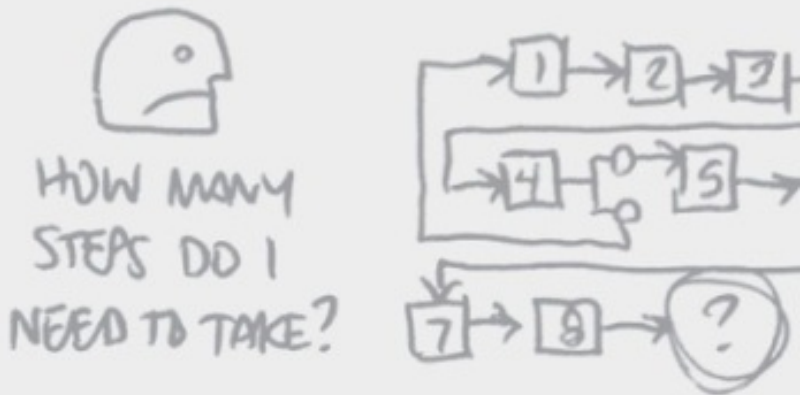
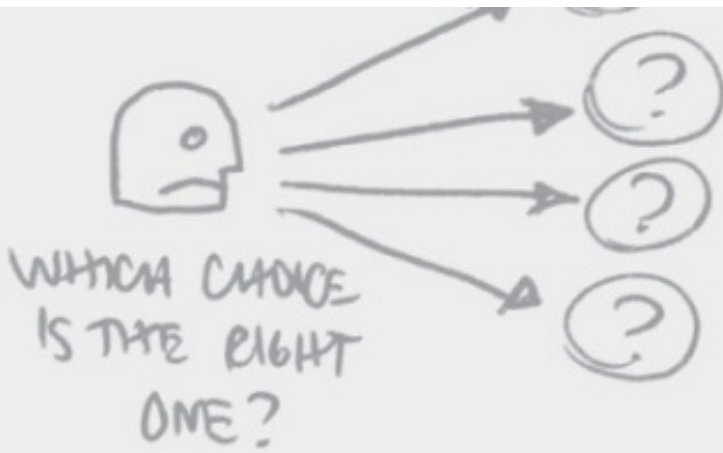
- ➔ **Can we get more time, money or resources?** Can we expand the budget to hire a few additional people? Are there internal folks we can pull from other projects to help us? Will expanding the schedule by two weeks cause any major consequences? Something has to give; you have to figure out what that is.
- ➔ **Does it have to work or look perfect by that date?** Quality is another thing that can be sacrificed (within reason) in a compressed time frame. Consider what things users may overlook if they get something else in the meantime.

To wrap this up, I'd like to share something I heard a consultant say almost a decade ago. It's always stuck with me, because it's one of the best pieces of advice I've ever received:

### **Silence equals agreement.**

If you say nothing about something you think is not possible, or that you believe is dangerous, you are not only agreeing that it's the right thing to do — you are also agreeing to *do it*.

# Identifying User Needs





## Identifying Business-to-Business (B2B) User Needs

So once we know what the business goals are for the product, now it's time to figure out what people (a.k.a. **users**) want from it. What are they after and what do they expect? What's the **value** delivered to them in this equation?

Remember, User Experience is a **value loop**: if value goes out to the people who use the product, it's highly likely that value will come back to the creator, the organization, the investor sponsoring the product. Value out equals value back in.

In the realm of commercial use, users are split into two segments. The first of those is **Business-to-Business (B2B)**. In a B2B situation, whatever it is that you're designing or building specifically addresses and enables business tasks and activities. The people who use it do so to further business activities — their own or those of their employer.

If you're creating a time and attendance system, for example, your users are employees required by their employer to fill out a timesheet every week. When we're talking about B2B users, there's a different tack you need to take in talking to them about their roles, responsibilities and needs.

## Asking the Right Questions

Asking the right questions starts with the actual **form** of the questions you ask. These should be open-ended, non-leading, non-specific questions that let the person fill in the details of the answer. You don't necessarily ask them about what software or hardware they use; you ask them what they **do**, how they would complete a task.

That means you *don't* ask a question like “*what part of this application do you use to do Task X?*”

Why? Because that question focuses on the **tool** the person is using — instead of the **process** they go through. And as I said previously, it's the process that matters most.

There are any number of factors unrelated to the specific software, hardware or even the task at hand that are contributing to the current issue or problem. And if you ask a narrow question that's tactic- or tool-specific, you'll never hear about any of them.

Usability and UX problems are very rarely the sole result of a technology issue; there are a handful of other seemingly unrelated factors that, in many cases, turn out to be the real problem: company policies, processes, politics, deadlines, stress, noise, interruptions, etc.

So again, if you only ask a user about the software she's using, **you won't get any information about the other factors that may be directly responsible for the issues at hand.**

The software may very well suck — but if there's a process or policy in place that doesn't allow that person enough time or give them the right data to do their job, **that's the *real* issue.**

The only way you can address the real issue is if you *know* about it. And if you don't know about it, the person and the organization will still have the same problem after the redesign launches or your engagement is over.

Not only is that bad for the organization, it's bad for you too, because in the organization's eyes they've just invested a great deal of time and money on... well... *nothing*.

The right question, then, looks like this:

***“Walk me through how you would complete Task X.”***

Now, that person may tell you about another system or website (or two or

three) they use in order to get additional information before they act. They may explain how they have to make three phone calls to *three different departments* to get additional information before doing anything. They may explain how they wind up using their mobile phone instead of their desktop machine because they're stuck in meetings for more than half their workday.

Along the way, when they volunteer information you find interesting or surprising, you simply prompt for more detail by asking "*why do you do that?*"

The goal is to uncover **what they use** (especially if there are multiple tools involved) and what aspects of those things help or hinder what they're doing. You're looking to build a picture of what's going to meet their needs the best. And to do that you need information. Not only about how they use something, but how they go about their day, what their *motivations* are.

You want to know why these tasks — and completing them in a certain way — is important. You want to know what they *expect* to accomplish and why it matters to them.

Throughout the process, remain focused on the **why**, the motivation. The desired result. Is accomplishing Task X going to make them look good to their boss? Is accomplishing Task Y going to save them time? Is accomplishing both X and Y going to make them richer? Taller? Better looking?

Whatever it is, you need to know about it.

Here are some questions you should always ask of B2B users:

- 1. How do you define a successful work day? What has to happen in order for you to feel good when you leave?** At the end of the day, what makes that person feel like they were productive, like they got things accomplished? What things happen that give the person that impression? The opposite question is valuable as well: what kinds of things make you feel unproductive? Frustrated?

**2. How do you go about doing X?** This can be any number of things that they do during the course of a normal work day. For example, if the product you've been asked to design is a time and attendance system, you might ask the person, *"How do you usually go about filling out your time sheet? Walk me through that process."* You may hear something like:

*"I type in my hours and hand my timesheet to my boss. He has to approve it, and if something's wrong or he doesn't agree, he gives it back to me and tells me what to change. If it's approved it goes to Anne in HR, who has to approve it, and from there it goes to Accounting because they have to bill the client for my time."*

In three sentences, this person has just given you intel on a **probable workflow** and the **people it may need to notify** when events occur.

In other words, you're getting **requirements** — just by having a simple conversation. From the previous answer, for example, you now know that:

- ➔ Three other people have to **view** and **approve** what the user submits.
- ➔ If it's incorrect, the approver needs the ability to **add a comment** explaining what needs to be fixed (and why).
- ➔ The user needs the ability to **modify** their entries and **re-submit**.
- ➔ Each time one of the parties approves the timesheet, the next party in the chain needs to be **notified** that it's ready for their review.

- ➔ It may need to be **integrated** with an existing accounting system where hours and project codes can be imported and populated on an invoice.

**This is how useful, valuable requirements are created.** Instead of picking them out of the air or mimicking existing systems, you start with people: who they are, what they do and what needs to happen as a result.

- 3. Did you do this (task) in the same way at other organizations you've worked for? Was it better, worse or different?** Most people have worked for more than one company, so they will likely have experienced variations on a theme — different ways of doing the same thing. Some may be worse than the current scenario. But hearing what was *better* may give you some ideas about improving what they're using now.
- 4. What are the biggest problems, obstacles or inefficiencies you deal with?** What are the things that prevent people from being efficient or make them do more work than they feel is necessary? What grinds productivity to a halt and stops everyone in their tracks?

Let's stick with the time and attendance example. If you're talking to someone in Accounting, you may very well hear:

*"People hate doing their timesheets because the system's so hard to use, so they do them late. When that happens, the end result is that invoices go out late, which causes stress all the way down the line from Accounting to HR to the Department heads. Everyone is hounding the next person in line to get the employee to turn in their timesheet!*

*And clients get upset because getting their invoice late screws up the flow of their internal bill payment cycle. So one simple act causes a lot of conflict and adversity for us; it*

*makes everything tense all the time here.”*

You’re looking for the **underlying causes** of issues, errors, backlogs. Again, notice that you’re not asking or discussing the software itself.

You just heard that there’s a consistent problem here: *people turn their timesheets in late*. So now you need to find out, in as much detail as possible, *why* people wait until the last minute to do their timesheets. The answer — the *why* — will tell you what features and functions you can design to help solve this problem.

- 5. Can you tell me about all the other systems that work with this one?** In the business world, you will *never* find an instance where one single system handles everything the organization needs to do on a daily basis. From the email system to the Intranet to the Project Management software to the CRM platform to the CMS that runs the client portal to the Accounting & Billing software... you see where I’m going with this? Separate applications, separate systems, separate users.

As such, the things that get *shared* between those systems — and how well or how poorly that sharing happens — have a big impact on user and customer experience. The design decisions you make related to features and functions will directly impact the other systems your app talks to — and may cause problems for those users as well. So in order to make good decisions you need to know what those other systems are and how they work.

This is the time where you **make sure there is a representative from IT at the table**. And if there isn’t, there better be one on your team. Not addressing interoperability properly can paint you in a corner frighteningly fast.

## Identifying Business-to-Consumer (B2C) User Needs

If the product in question is used directly by consumers, then we're talking about **Business-to-Consumer (B2C)**. Anything sold via Amazon.com, for example, is a B2C product because it goes directly to consumers. Google Play, iTunes, Spotify and the like all sell B2C products.

The questions for B2C users are necessarily different. We're not going to ask them about daily work habits or company-mandated goals and assignments. We're not asking them about the company that they're a part of, either. Why? Because those factors have a lot less influence on their buying or use decisions.

## Asking the Right Questions

The approach, once again, should be open-ended; no leading questions. No matter what the app or site or system is meant to help them figure out — what their shoe size is, for example — you start big and simple.

Your role here is not to solve problems or suggest solutions, it's to get **unbiased information**. So don't give them advice or try to push them in any particular direction. Just let them answer the question and *listen*.

Open-ended questions often prompt silence, which allows people the necessary space to walk you through the answer. So patience is extremely important here; let the silence following the question do the heavy lifting, and repress the urge to fill it with your own voice.

Here are some examples of open-ended questions:

1. **What part of this do you hate doing?** What's the part of this process that you know is coming, but that you're really dreading? Is there a part you wish you didn't have to do?

For instance, if you're talking to somebody about a checkout process on an ecommerce site, they may absolutely loathe the common disconnects of entering credit card information. You may

hear:

*“Well, I really hate entering my credit card because I always have to figure out which number corresponds with which month. They’re never labeled the same as what’s on the card! I mean, the card says 10 and the droplist says October, and I actually have to count in my head to figure out what month I need to choose on the screen. Every. Single. Time.”*

That answer, especially if echoed by a significant number of other people, gives you a clue that mimicking the format on the card, or including the month’s corresponding number, might yield measurable improvement.

- 2. What frustrates you most about this?** What makes you think *“ARRRRGH!! Why do I even have to **do** this?”* For instance, people often complain when they have to enter in any sort of identifying account information more than once. That’s because in most instances (a) they’ve already been asked for it and (b) they expect the system to have it already.

So they may say:

*“Why does the person who answers in the call center ask me for all the information I just spent 15 minutes keying in after the voice prompts??”*

Or you may hear:

*“Why the hell do I have to give you my username again when I start the checkout process? I already gave it to you when I logged in!!”*

Those are the kinds of things that you’ll hear when you ask that question. And when these answers are near-unanimous, they



represent opportunities to deliver UX greatness. Or to alert the client that there are Customer Experience problems that need to be addressed, in areas *outside* the technology and/or the product.

- 3. How often do you use this product (or tool)?** If you're creating something altogether new, the question might be *"how often do you use this kind of product?"* *How often do you come to this site? How often do you open this app?"* In this case, you're looking to learn something about **frequency of use**. And that tells you something about how valuable the product is.

If it's used often, it's probably become part of that person's daily life. And if it's part of that person's life, it's pretty important to find out what's good or bad about it.

- 4. What do you use it to do?** Quite often, you'll find that someone is using an app or site in a way that's slightly (and often radically) different than what it was designed to do. This, again, is an opportunity to uncover potential features you may never otherwise have thought of.

Google, for example, is essentially a search engine. You go there and you search the Internet. But there are a lot of people for whom *Google IS the Internet*. As such, these folks will go to the search bar on the Google main screen and type in a full URL, *www.givegoodux.com*, instead of typing it in the address bar in the browser. For them, Google is the **one and only way** you use the Internet.

It's really important to ask this question — because the answer may be a far cry from what you expect.

- 5. Can you show me how you do that?** When the interviewee is explaining, *"I do this, and then I do this and then I look at this in order to..."*, ask them to **show you** how that happens. Here's why: what people say they do isn't always a perfect match for what they

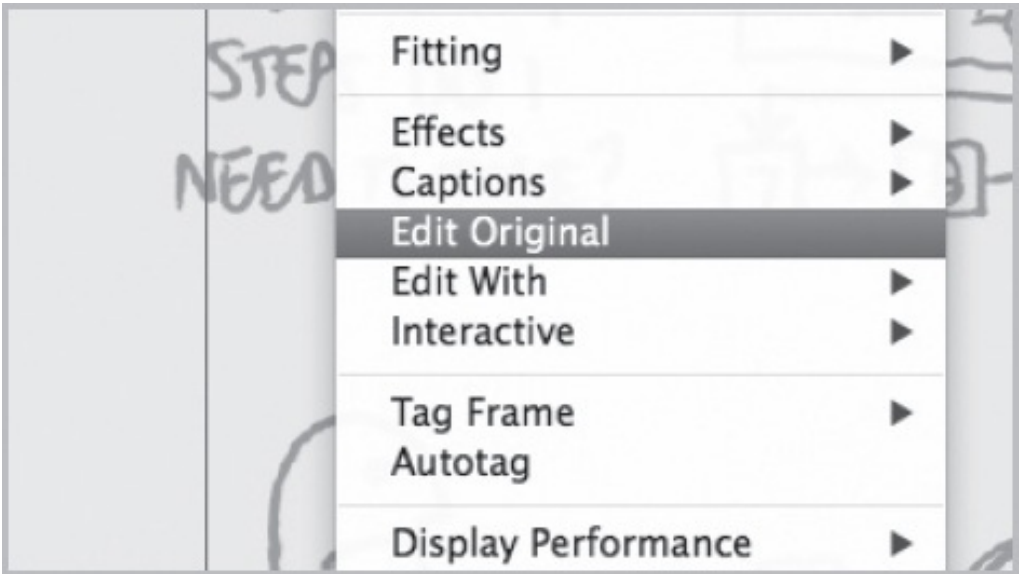
*actually* do. So by observing the actual action, you may also pick up on a few things that they're not verbalizing.

You may watch them struggle to press a key combination, or you may watch them wander around the screen before they can find the link that they're supposed to click on. Those little things you see will tell you an awful lot in addition to what you're hearing. When it comes to user behavior, seeing is most definitely believing.

- 6. What other things do you do (or use) before, during or after you use this product?** Nothing is used in a vacuum, so a lot of times there will be something that they're doing *before* they open your app, and then there may also be some consistent task that they perform *after* they use your app with a different tool. If that's happening, you want to know what those other tools or products are.

Adobe, for example, made some critical changes to its InDesign page layout software after learning about how Designers were using it. Adobe learned that the process of **editing an embedded image** was cumbersome; you had to go back to the source file, open and edit it in Photoshop or Illustrator, then go back to InDesign and update the image. Multiple steps, lots of time lost.

Adding an *Edit Original* option when right-clicking the image streamlined that workflow. If I right-click on an image in my book layout, I get this:



Clicking *Edit Original* **opens the image in its native application** automatically, and, once it's saved, InDesign **updates the image** automatically.

Removing a few steps felt like a quantum leap in simplicity for designers — and more importantly, they felt like Adobe was *listening*. They felt like Adobe understood their needs and cared enough to *do something* about it. That's how **loyalty** is both created and cemented.

So if users are supplementing your app with a few others, it may very well be because those apps do things **they wish yours did**, and they may also wish there was more interoperability between them.

These are critical points of identification that open the door to determining what features and functionality will really make an impact, increase use and improve experience.

## 7. Are there other systems you've used that are similar to this

**one?** What you're asking here is “*how does this system stack up against other things that do the same thing (or similar things)?*” If there's no direct comparison to be had, you might ask:

- ➔ **What are the top three sites or apps that you use on a regular basis?** Which do you return to time and time again?
  
- ➔ **Can you see this app becoming part of your daily routine?** Why or why not?

This holistic approach will give you some insight as to what recurring, useful role your product or service could play in the person's life. And that insight should be considered within the context of *all the other things* that they're doing.

## Questions Specific to Redesign Projects

A significant chunk of the work you'll do as a designer or developer will be **redesigning** something that already exists. You'll be helping to roll out version 2.0 of the app or version 4.1 of the website or version 6.7 of the internal timekeeping system.

In these cases, in addition to your interviews, you want to ask questions that essentially create an audit of the existing product.

That just means asking the same questions covered in the preceding sections — except this time around, you're asking them to frame their answers within the **context of using the existing product**. In this case, their experience up to now is very useful for informing what needs to change or be improved.

So when you're talking to **stakeholders**, you'll mainly be asking questions about how the current version of product impacts business and customer support activities. In addition to how useful the outcome has been. Here are

some examples:

1. **What occurrences or information led you to believe a redesign was needed?** What was the catalyst that made everyone wake up and say “*we have to do something about this?*”
2. **What usage data, analytics or customer/partner feedback do you have that you can share?** Do you have data that helps illustrate the problem?
3. **What do you believe a redesign will do for the business?** In other words, what will happen that’s *not* happening now?
4. **What criticisms or complaints do your salespeople hear most frequently?** What issues do they spend the majority of their time discussing or trying to solve?
5. **What complaints do you or your call center hear the most?** Do those issues prevent people from a successful outcome with the product?

With **users**, you ask everything in the preceding section, along with questions like:

1. **Are you currently using another product (or process) to do things that this one doesn’t?** If the software is lacking, how do you get around its feature/function limitations?
2. **Have you used another product to do the same thing?** If so, was it better or worse than this one?
3. **What features here act as obstacles to you?** What do they keep you from doing or accomplishing, and in what way?
4. **What features and functions do you think could be better?**

## *Think First*

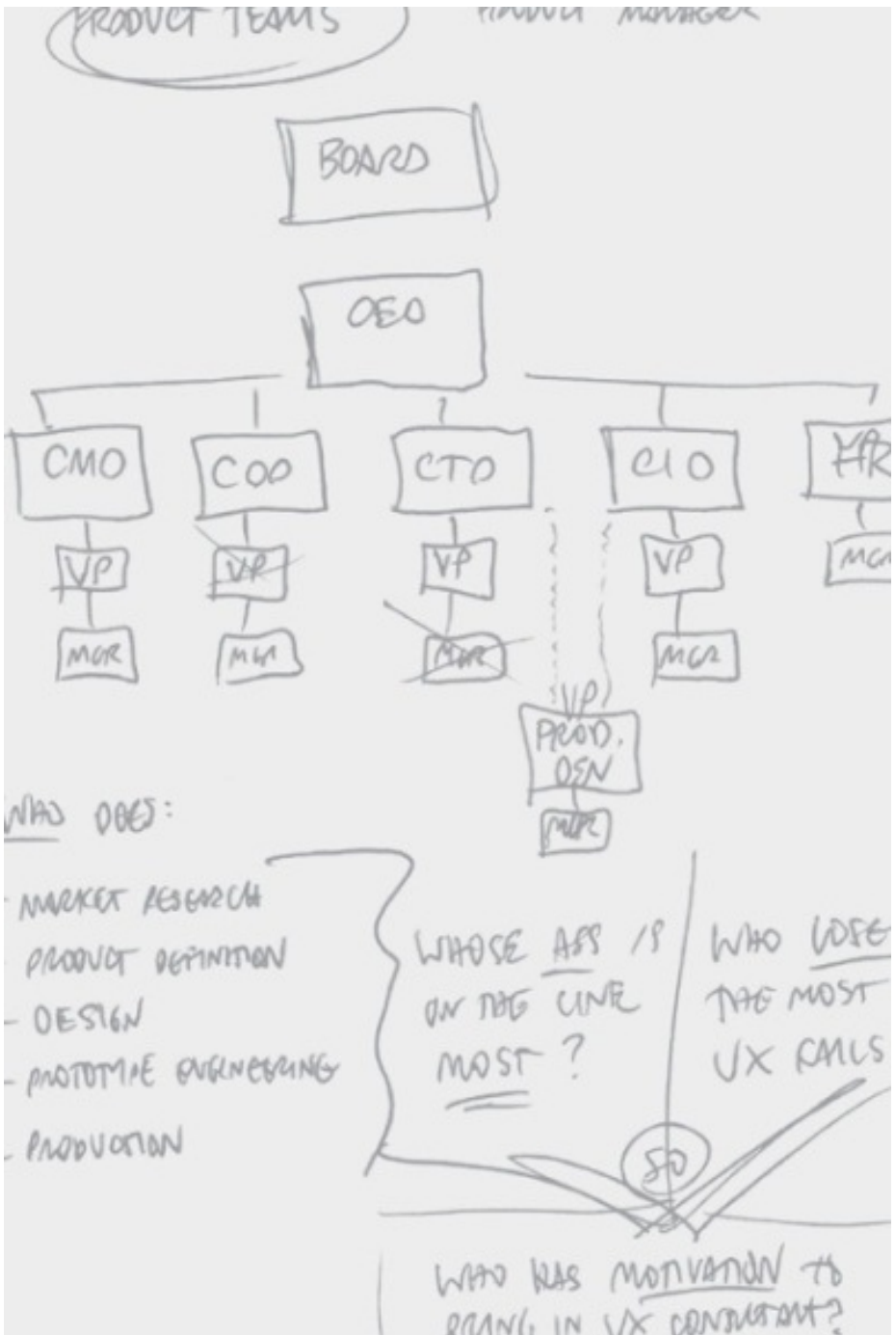
What's close to what you need, but falls short of either your expectation or your anticipated/expected outcome?

- 5. How would those improvements help you?** Would you be more efficient? Would you save time? Would it help you win the affections of the opposite sex?

OK, so maybe you skip that last question.

Unless, of course, your client happens to be an online dating or matchmaking service.

# **Three Critical Questions You *Must Ask***





No matter the industry, niche or product type, a core component of developing solid product strategy is asking three crucial, universal questions. Years ago I attended an Adaptive Path seminar where the presenter introduced three critical questions tied to positive UX and product value. I became a believer on the spot, taking *furious* notes. I have *insisted* on asking these same questions of my clients for the last 26 years. Whether you're building something from the ground up or redesigning an existing product, your marching orders are the same at this point:

- ➔ You need to find out **what's worth doing**.
- ➔ You need to have a shared understanding of **what you're creating**.
- ➔ You need to be absolutely sure everyone understands (and agrees on) what **value it delivers**.

## One: What's Worth Doing?

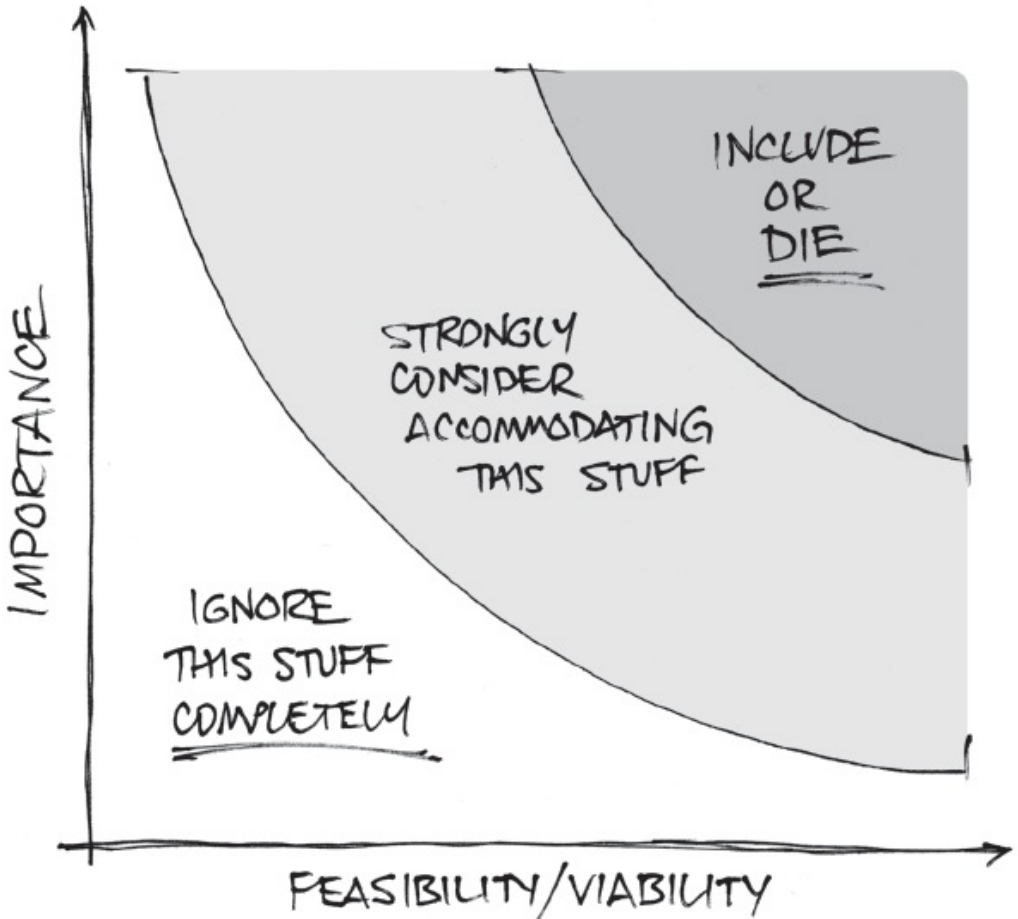
We've got a handle on what the business needs, along with an understanding of what users need. Now, from all of that we've researched, from all that we've heard from stakeholders and users, we want to determine:

- ➔ **What can be accomplished within the bounds of reality?**  
What are we certain we can actually achieve, meaning both tasks and outcomes?
- ➔ **What's worth the organization's investment in the project?** Will everything on our list result in value back to the organization?
- ➔ **What's worth *our* time and investment in the project?** Will

## Think First

the things we do deliver value to users and to the business, or are they band-aids on gaping wounds?

The answers to those questions are determined by figuring out what the tradeoffs are between the product's **importance** and its **feasibility/viability**. This graph illustrates the relationship between the two.



On one axis you have **importance**. How important is the product as a whole — to the business, to users, to achieving the intended end goals? Individual features and functions, and the degrees to which they fulfill needs and deliver

value, also have to be weighed and considered here.

The corresponding axis represents **feasibility** and **viability**. Here, we plot the answers to questions such as:

- ➔ What can we reasonably accomplish with the **budget** and **resources** (read: people) we currently have available?
- ➔ How much of the **anticipated workload** can we conceivably do in the time that we have allocated to us?
- ➔ If we do get the work done and the product launches, how will we continue to **maintain and improve** it post-launch?

Anything that lands in the **lower left** section is *out*. As in immediately. If a proposed feature is of low importance and it's highly unlikely that you can do it with the constraints that you have, then you do one of two things:

1. If you're working on an **existing product**, you **postpone any UX improvements** to the features in question for a later release, or
2. If you're working on a **new product**, you **scrap those features altogether**. And if you're evaluating the product as a whole, you scrap it and go do something else.

You never want to waste time or money addressing things that (a) aren't **important** and (b) probably aren't **possible**.

Features that fall in the **middle section** of the graph should be accommodated, but you shouldn't spend the majority of your effort doing so. Anything that lands here is likely less than critical for both the users and the business — and it's also likely you've got some doubts as to whether you can pull them off in the first place.

So these are things that, despite your perfectionist tendencies, simply **don't have to be the best they can be**. Sometimes, as a friend of mine likes to say, *"the most perfect something ever has to be is **done**."*

Anything that falls in that **top right area** is of high importance and high feasibility. That means you're damn sure it's *important* and you're equally damn sure you can *do it*.

These are the **sweet spots**, the things that are going to provide real, measurable value to all players. It's well worth your time to make sure those things are not only incorporated but that they are designed extremely well, that they shine extremely bright in terms of the value that they provide.

These are the things that enable the product to serve as an **answer to a prayer**.

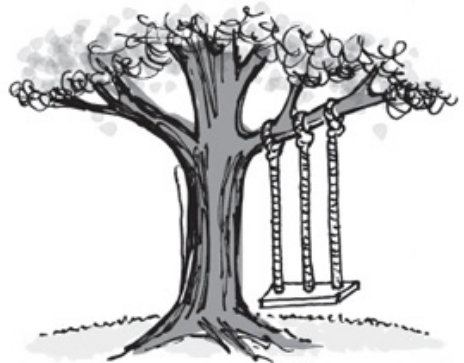
As such, that's where the majority of your UX, design and development effort should be spent — because that's where the **value** is, for both you and your users/customers. That's where you'll get the most return on your effort.

## Two: What Are We Creating?

There's an old joke about how disconnects happen between a project team. Essentially it illustrates how miscommunication takes place across each member of team. It's a universal example that has been applied to nearly every industry, a story that's been told and re-told millions of times.



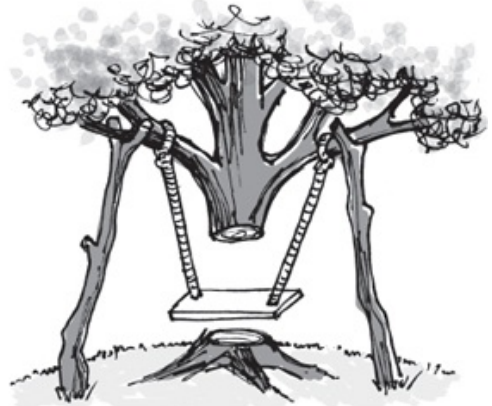
HOW THE CLIENT EXPLAINED IT



HOW THE SALES PERSON UNDERSTOOD IT



HOW THE PROJECT MGR. UNDERSTOOD IT



HOW THE DESIGNER DESIGNED IT



HOW THE DEVELOPER CODED IT



WHAT THE CLIENT REALLY NEEDED

Aside from being simultaneously painful and hilarious to those of us who've experienced it, there's also a critically important **moral** to the story: **when everyone isn't on the same page, the end result satisfies no one.**

The illustration on the opposite page tells one version of this tale. Obviously, there were some massive gaps in communication here, resulting in very different ideas about what the **end result** was supposed to be. Now, while this is an extreme way of representing this idea, it's not really all that uncommon. In fact, it's actually pretty easy for people to wind up with apples when the discussion is about oranges.

One very big reason for this is the fact that **we all have our own languages**, and our own variants of that language. And I don't just mean our ethnic backgrounds; I mean the ways in which our experiences shape our **understanding** of things we see, hear, or read. Cultural preconceptions — our mental models and reflexive associations about the way things work — are applied to everything we see, hear and do.

If you describe an object to six people, they'll all likely know what it is. But each person's **mental image** of it and related **associations** about what it *looks like* or how it *feels* or what it *does* may be very different.

As such, it's not uncommon for everyone to walk away from the table thinking slightly differently about what they're all trying to accomplish — and what it's going to take to get there.

When everyone is not on the same page, the end result will satisfy no one. This lack of common understanding derails projects at frightening speed. And in my experience, that derailment is **extremely difficult to recover from** once it happens.

So the questions in the preceding sections need to be asked of every single person involved in the project. And the answers need to be documented and shared in some form.

Specifications, requirements, formal documents or email; it doesn't matter how you do it or how you share it. But whatever the common understanding of the feature set and required functionality is, it needs to be **available** and **understandable** to every person involved.

And we're not just talking about software specs. Every player also has to have a common understanding of what the **content** is, along with where's it going to come from and who's going to create and approve it. That means everything from statistical data to marketing content to images, audio or video.

Part of your job is to make sure that everyone at the table is in agreement. You want shared understanding of the **project goals**, along with what needs to be designed and built in order to *meet* those goals.

And above all else, you want to make sure that your discussions address the **why**, in addition to the **what**.

Taking the time to dig in deep during the strategy phase will pay dividends over and over as the project progresses. You will find that the subsequent phases will run much more smoothly, and the very next question will be easier to answer.

## Three: What Value Does It Deliver?

That, as you might imagine, is a pretty big question. The good news is that there are a series of smaller questions that can help you answer it.

1. **Who is our target audience?** Down to the most specific detail we can uncover, *who's going to use this thing?* Are they male or female? Are they of specific ethnic descent? Do they have a specific job role and responsibility?

For example, assume that research thus far indicates that our typical user is an African-American pastry chef, working for an independent bakery. She is most likely female and anywhere from

thirty-five to forty-five years old. The more **detail** you can put around this user, the more specific you can get about who she is, what her environment is like and how that affects her assumptions, expectations and behavior. That makes it easier to answer the next question, which is...

- 2. What experiences are valuable to them?** Let's say that the product you're designing is a mobile app for a Blackberry wholesaler. This wholesaler — along with the Blackberry industry as a whole — has a vested interest in these pastry chefs because they are directly responsible for their bakery's fruit purchases. They are the gatekeepers to profit.

After interviewing 30 African-American pastry chefs, let's say we've discovered that there is currently no way for them to monitor the status of their fruit shipments in real-time. That's important because their ability to compete is dependent on their ability to schedule production accurately and meet shipping deadlines to restaurants.

So we come up with the idea to provide real-time shipment tracking via text alerts to their mobile phones (they're busy, you know). That alone provides competitive advantage, so it could also be a compelling reason for them to buy exclusively from our particular client/Blackberry wholesaler.

See how this works? Not only have you defined a very specific *audience* — you've also defined a very specific *experience* that is meaningful to that audience in some way. Something that fulfills a **critical need**; something important enough to motivate *use*.

- 3. How is our product going to be different from (direct and indirect) competitors?** Bob's Blackberry Barn has been the distributor of choice for more than 70% of our user base. So it's going to be tough to unseat him as king of this particular hill. What can we do that Bob can't? Is our new real-time tracking feature



enough to convince his customers to work with us instead? Are we at least **on par** with everything else he offers?

And it's not just about direct competitors like Bob. You also have to consider **indirect competition** as well. Things your audience might go for instead of what you're offering, because it's **close enough**.

What about *Raspberry* wholesalers, for example? Sure, it's a different fruit, but it's less expensive and CNN just did a story on how the National Raspberry Association is making a big pitch to the baking industry right now. What incentives are they offering these chefs that might make them order Raspberries instead of Blackberries?

These are questions that, while seemingly tangential, absolutely do impact your feature set and your design decisions. As such, they have to be asked.

## The High Cost of Misunderstanding

This may all seem painfully obvious, but you'd be surprised (or not, for those of you who have some experience) at how often a project dives right into design and development at word *GO!* without covering any of this.

Unless you know, to some reasonable degree, what value you're giving people, and why it matters specifically to *them*, you're shooting in the dark. You're hoping that you hit something. And that's not a good place to be, even if the end product isn't yours.

Because inevitably, when the project finishes and the rubber hits the road, **you're still on the hook** for its success. And that particular song goes like this:

➡ When the mobile app launches and the real-time tracking *isn't*

*included* because you didn't want to be bothered asking questions or interviewing users, the chefs **don't use it**.

- ➔ And when the mobile app isn't used, the client begins to wonder **why they paid you all this money** to redesign it.
- ➔ And when the client begins to wonder about such things, **she gets aggravated**.
- ➔ And when she gets aggravated, she starts **pointing fingers**.
- ➔ And when she starts pointing fingers, I guarantee that **one of them will be pointed squarely at you**.

Obviously, this is *not* a place you want to be.

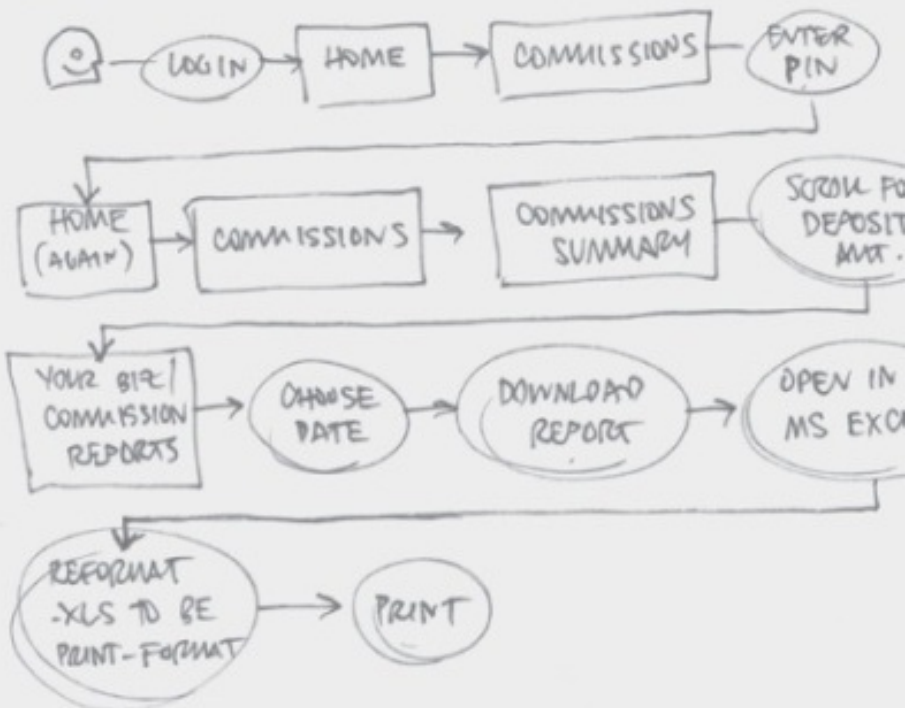
Every project, of any kind, involves any number of different people. And as we've established, they all have different roles, motivations and goals related to the work at hand.

From the client stakeholders with their project team, to your project team, to end-users, every person has very specific ideas in his mind about what this thing is going to do, along with how it's going to look and act.

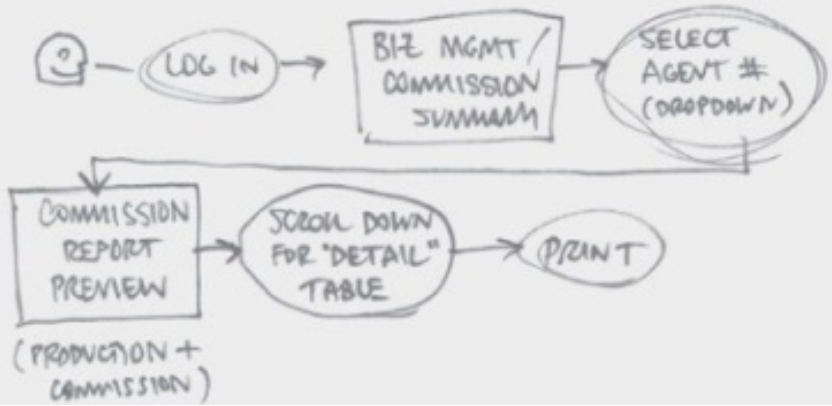
So unless the scenario above appeals to you, take great pains to make sure everyone involved has a **shared understanding** of what those ideas are.

# **Turning Strategy Into Scope**

COMMISSIONS REPORTING - SCENARIO (A)



COMMISSIONS REPORTING - SCENARIO (B)



**Have you ever worked on a project where new feature requests seemed endless?** A situation where you are knee deep into development: you're past alpha, way past beta. You're into final programming and QA testing and putting what you think are the final touches on the site, or the app, and the client calls and says:

*"I was thinking (Red Alert!! Red Alert!!)...what if a customer purchases something that isn't really included in their current service contract? What if they want A, B or C, but we don't support those options in the current contract?"*

To which you say, as calmly and as respectfully as is humanly possible, *"I have no idea what you're talking about."*

To which they explain that while these options are *available* on the site for purchase, a customer's particular service contract may make them *ineligible* to do so. So what if they purchase them and pay us, even though they shouldn't be able to do that?

And you're thinking to yourself... ***why in God's name did I not know about this six months ago?***

## **Avoiding the Neverending Project**

It's pretty much common knowledge, or it should be, that the discovery of requirements during UI design, or during development, is pretty much a recipe for disaster. Unfortunately, it happens quite often, which is one of the reasons office buildings don't have windows that open.

But no matter how much we all believe this is bad, no matter how hard we work to avoid this situation, it still happens. Most of us have come to terms with the fact that it's natural for clients to remember some infrequently used feature or edge case once they actually *see something* on the screen.

That's because not everyone has the same capacity for abstract thinking. For many people, once something is **visible**, it's more **real**. So in many ways, seeing a wireframe or an actual UI provides a needed foundation for analysis.

That's why a client, while reviewing a UI design, will often say "*Ohhhhhhh, you know what? We can't do that because of A, B, C, and/or D.*" And that will lead you to a great moment of self-righteous anger, during which you will blame them for not having their requirements properly defined or clearly communicated. At that point you will feel like a victim — which feels great because hey, it's someone else's fault.

**Except... it isn't.**

This is **our problem**, not theirs.

And quite often, the reason it's our problem is because a lot of us tend to rush into the design and development process **without really, fully understanding everything that our solution needs to do**. We didn't take the time to properly define scope. Or, as is more often the case, we didn't raise the red flag when we *knew* scope wasn't properly defined and the client gave the green light to move forward.

As I mentioned earlier, silence is almost always interpreted as *agreement* — and that can get you in trouble.

In order to be successful, you have to hold yourself fully accountable for making sure scope is clearly defined. You have to take the attitude that if you don't do it, no one will. Whether that's true or not is irrelevant. Unless you take a proactive lead in defining scope, you're in for a world of pain. Trust me on this one.

Whether you're using a Lean or Agile methodology, or some related iterative process, you *still* have to properly define scope. You still need to make sure everybody involved shares a common understanding of what you are all building and how that relates to the project's overall goals and user needs.

You want to be sure everyone agrees on what you're doing and why. This gives you a **benchmark** to evaluate the progress of the project. At any given stage you have a clear view of what you've all done thus far (and how well you've done it), and you have a pretty solid sense of what you might expect in the future.

All that said, no scope is air-tight final. Don't expect to define scope to the degree where you can say "***Beyond the shadow of a doubt, this is exactly what it's going to be and we will not deviate no matter what!!***" Sorry, not possible. New things are going to come to light as the project progresses.

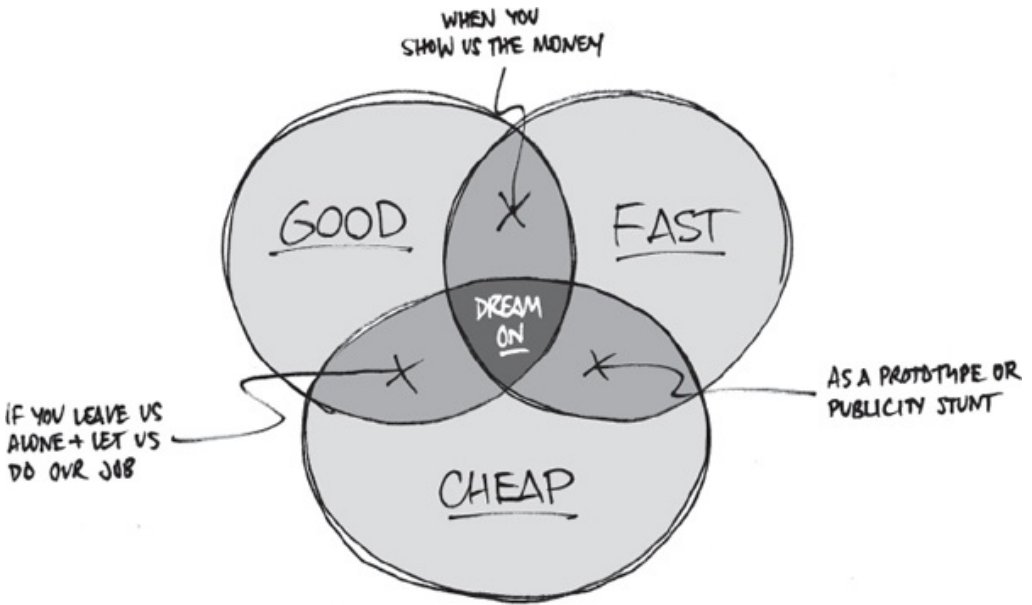
However, if you've done the work up front to clearly define your scope — if you've clearly defined the boundaries of what you can and *cannot* do, what you are and are *not* going to do — life gets a *lot* easier.

## Scope Tradeoffs

Among the features and functions that you've decided are (a) important and (b) included, you'll have to make a tradeoff (or several) between three key things that factor into any project: **time**, **quality** and **cost**.

We've all heard the old joke where the client says, "*I want my project to be done **fast**, **good**, and **cheap**.*" And the hired gun looks back at them and says, "Okay, **pick two**." Here's a slightly modified version that explains the reality of the situation a little more clearly. Multiple versions of this litter the Internet and I have not been able to track down the original author, but it's too good not to share here. So with apologies:

## Think First



Now this is just a little humor to make a point; it's never a good idea to be rude to a potential client, or to *anyone* for that matter. But when you're defining what's included and what's not, you have to remember that even a *small change* in your defined plan will automatically result in at least one (if not all) of the following:

1. More **time** will be needed
2. More **money** will be needed
3. **Quality** will either increase or decrease

All of which, of course, place a strain on your available resources and your ability to succeed. Defining and managing project scope is all about making sure you consider, understand and manage those tradeoffs.

In the next few sections, I'm going to shed some light on exactly how you do that. And if nothing else, you'll walk away with a solid sense of how to tell



when scope isn't properly defined. This will serve as your beacon, your signal to take a step back and say "*Waaaaaaait a minute, we're not done here; there are things we don't know yet. And until we know how deep the water is, no one's diving in.*"

## Avoiding Perpetual Beta

The first reason we define scope is to get the train on the tracks, and to get everybody moving and doing the work of strategizing, designing and developing. We're working to avoid the curse of **perpetual beta**, which I have no doubt many of you are familiar with. There are any number of things that can trip up progress, and in my experience, taking the time to properly define scope negates the majority of them.

When you define scope, you're essentially forcing everybody (albeit politely) to see and address any potential conflicts:

- ➔ **What are the inherent risks related to what we're doing?**  
What haven't we considered yet? Who haven't we talked to?
  
- ➔ **Do we have a clear picture of indented outcomes at specific points between start and finish?** Are they clearly defined and achievable?
  
- ➔ **Where is it possible that we'll get stuck?** What limitations on time, money or talent exist?

Asking those kinds of questions, and really thinking hard about the answers, goes a long way in making sure that the time you invest in designing and building is well spent. A clearly defined scope makes everyone more **productive**, more **proficient** and a LOT less stressed. And the client is a lot less stressed too, because they see clear progress. So the time and effort you devote up front to defining scope will serve you well later on.

The reason we *document* the established scope is to give the entire team, on your side and on the client side, a **reference point** for progress during the project lifecycle. A clear scope also gives you a common way to talk about those things in a manner that everybody is going to understand — because you all call it the same thing. You don't have to write a novel; just capture it somewhere, somehow and make sure every person involved has access to it.

Let's walk through a quick scenario: You have multiple registration processes. There's a registration for **end-customers**, but there are additional, distinct registration processes for **distributors** and **manufacturers**. And there's yet *another* registration process for **advertisers**.

All these folks will need to use different parts of what you're building, and each of those parts will ask for different criteria to determine customer eligibility or service levels.

Now assume we're having a conversation, and somebody says "*Oh, that happens during the **registration process.***"

Uh...*which* registration process are we talking about?

Is it the **client** registration process?

The **manufacturer** registration process?

The **advertiser** registration process?

Laugh if you will, but these conversations are absolutely no fun whatsoever, and I've had more of them than I can possibly count. By simply being specific — by documenting the fact that from now on, we're going to call this the **client registration process** and it consists of **this data** and **these steps** — everybody knows what we're talking about.

And for anyone who doesn't know, that decision is documented and shared, which means that, at any time, they can pull up that document and get

educated. That sure beats waiting a week for schedules to open up so a meeting that doesn't really need to happen can be scheduled.

The rise of UX, design and development processes such as Lean, or Agile, or any of these methodologies, discourages lengthy documentation, a practice I agree with. When these processes are misunderstood, however, people get the mistaken idea that **no documentation of any kind** is necessary. But that approach isn't true to Lean or Agile practice — it's more like the proverbial throwing out the baby with the bathwater.

In the two-plus decades I have been doing this, eliminating documentation only results in one thing: a product with a slew of features, each of which has remained incomplete for the **last four months**. Every iteration has profoundly failed to match both the original idea for the feature, along with the team and client's collective expectation of what it is and how it's supposed to work.

Sure, we're iterating — we're constantly putting stuff out and reviewing, tweaking and improving it — but nobody fully understands what it is they're building. No one knows what those parts and pieces are *really* called or how they're all supposed to work together. So we're working. And re-working. And re-working. We're running fast, no doubt about it — but we're doing it on a *treadmill*.

Indulge me for a minute and let me explain why writing things down — documenting them somewhere in some small detail — matters. And why doing so has a *profound* impact on user and customer experience:

**Have you ever been to a restaurant where the waiter memorizes your order instead of writing it down? I have, and I absolutely, positively hate that.** Know why? Because unless I'm sitting in a five-star establishment, he is going to get my order *wrong*.

At least eight times out of ten.

And if there are a dozen people with me, he's going to get a few more wrong as well. And you know what? I'm not impressed even one iota that you are able to remember all of this in your brain. Especially since cognitive psychology and basic physiology proves that you *can't* actually do so in the first place.

What *really* impresses me? What makes me *truly* happy and provides a deeply meaningful, satisfying experience? **Get my order right.** The first time.

Unless there is a common reference point that everybody can refer to as each iteration occurs, you will live in the land of perpetual beta. Case CLOSED. No one will ever convince me that no documentation is a good idea. No documentation essentially means no *win*. I'm here to tell you that if nothing is documented, your project will quickly turn into a giant snowball, gaining size and speed as it rolls ever faster downhill.

And you, my friend, are standing at the bottom of said hill.

Again, this doesn't mean you have to write a novel. It doesn't have to be "formal" in any sense of the word. But you do have to write down all the **essential features, components, and functions**. I don't believe in specification documents either — nobody reads them, and that's the truth. Agile practitioners are completely correct when they say a two hundred page requirements document is outdated the minute it's complete. I totally agree with that.

But writing *nothing* down is every bit as short-sighted.

A common understanding of features, schedules, and milestones puts the end squarely in sight. It puts everybody on the same page, it gives everybody a common reference point, and a shared understanding of **what we're after** and **how we're going to get there**.

No matter what your process is, you *must* do this.

## Know What You're Building (and What You're *Not*)

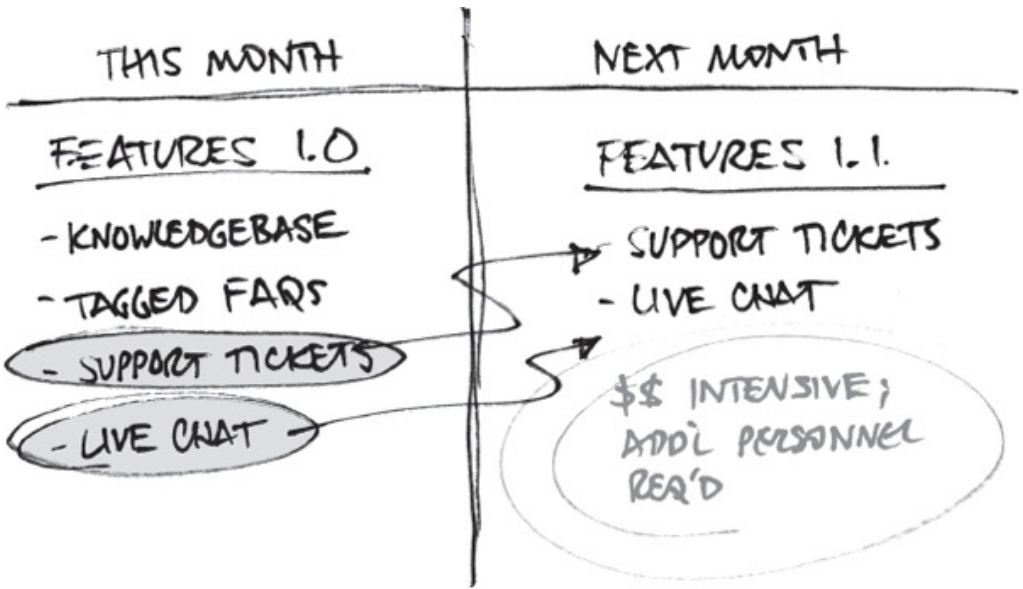
During the initial stages of any project, everybody has ideas about features. Your team, the client's team, end users, customers, the CEO's brother-in-law's cousin. The point is everybody is going to suggest stuff. All these ideas are going to come out of the air, and some of them will be very interesting, useful and in some cases very valid suggestions.

But more than a few of those things that sound like good ideas simply may not be **possible**. At least not **right now**, anyway.

We may not have the time or the budget or the talent to pull these things off. So, although this is certainly the time for idea generation and brainstorming, it's also critically important to draw a clear line between what's doable *right now* versus what has to wait for later.

Engineers I've known are fond of saying "*Anything can be done. The question is how long it's going to take to do it.*" When you don't know the answer to the "how long" part of that question, you have to keep a running list that you must pay close attention to. You have to **qualify** the things on it to the best of your ability.

Maybe it's written on a whiteboard with a big DO NOT ERASE in red at the top. And maybe it looks a little something like this:



Maybe three weeks ago this all seemed feasible, but right now something has to wait. That dynamic support ticket system and live chat feature are too expensive for the budget. And by the way, we don't currently have the bandwidth to devote time to those features. And let's not even mention the fact that HR hasn't started hiring people to work tickets and chat with customers!

As such, we relegate those three things to the **next iteration**, next month. We'll revisit them then, see if they still make sense and figure out what's possible.

It's a simple matter of managing **what** you're doing and **when** you're going to do it. Again, the key is to *write it down in the first place*. If you don't have the list, it's pretty damn hard to make those decisions. And if you're making decisions without the list, **you're guessing**.

You may *think* you know what has to get done this month, but you're kidding yourself. You don't. And it's through no shortcoming of your own — that spongy mass between your ears simply isn't capable of that degree of

perfection.

No matter how great your talents, you simply cannot keep all that stuff in your head. You cannot expect to charge through and have a solid, continued, miraculously updated sense of what's going to fit in, and what's not. There are roughly 80,000 miles of research to bear this out, by the way (*see the **Resources** section at the end of the book*). So please understand that this is not just *Joe's opinion on how things work* (even if I do happen to be more opinionated than your average stadium full of people).

So once again: **document it**. Whether that means a snippet of information delivered on a project management site, trading emails back and forth or writing something on a whiteboard and leaving it up there for everybody to see it, the important thing is that you **do it**.

It doesn't matter what form it takes, or how long, or how formal. What matters is that you write it down so, at any given moment, everyone knows:

- ➔ **What** we're doing
- ➔ **When** we're doing it
- ➔ What we're **not** doing
- ➔ What we're not doing **right now**.

## Scope Creep: Just Say No

One of the biggest reasons to define scope is to avoid what's called *Scope Creep*. Scope Creep happens when additional features, additional suggestions and ideas for functionality not only keep coming up, but they also become *promises*. Promises that are now assumed to be included in the final product.

This usually means that someone on your team has the “**sure, we can do that**” disease. Whether it’s someone actually on the design or development team, a Project Manager who’s far removed from reality or an Account Representative too eager to say yes, someone’s not guarding the gate.

A friend of mine likes to call it a “*death by a thousand cuts.*” Each little addition, each little feature doesn’t seem like much in and of itself. But collectively, their impact is **enormous**.

Every time that seemingly harmless little snowball rolls forward, it gets an inch bigger.

Every time someone says “*That will probably take me a day to do, so it’s no big deal,*” that snowball gets bigger.

Every time the Project Manager says “*Guys, we have to do this to keep the client happy,*” that snowball gets bigger.

Every time something not already in the specs — and therefore unaccounted for — is agreed upon, **the snowball grows exponentially**. It gets bigger and faster and stronger and increasingly harder to *stop*.

Before you know it, that snowball-turned-avalanche is obliterating everything in its path — deadlines, budget estimates and the sanity of everyone involved. The inevitable crash is coming.

**Scope creep kills project success, efficiency and profitability faster than anything I know.** The customer wonders why can’t get the work done that you agreed to. And you and you and your team are frustrated and can’t see how any of this can even be accomplished — *and who the hell agreed to this anyway??*

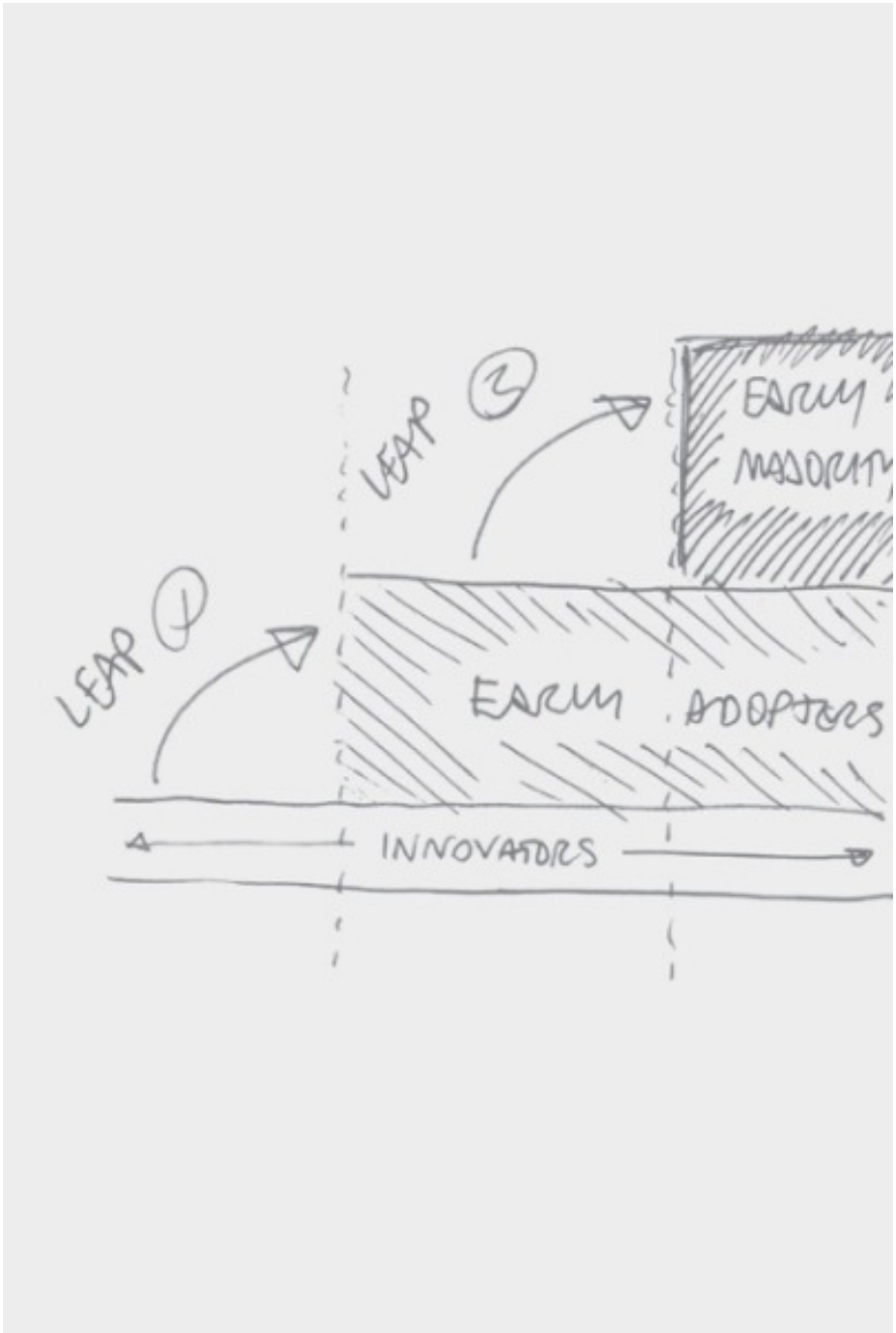
All that hindsight is really, *really* painful. And it can be avoided.

Just say no — or, at least, not right *now*.



Capisce?

# **Strategic Tradeoffs and Product Evolution**



**Every choice you make in life almost always means that you'll have to give up something else, somewhere else.** It's no different in the world of product development. Just like many of our strategic decisions, **tradeoffs** are an essential part of scoping a product. From what you decide to offer to how much of it you will design or build at any given moment, you are making tradeoffs.

Every feature or function you design — or intend to build — will absolutely affect a number of factors tied to success:

- ➔ Making sure the **strategic objectives** of the product become reality via UX, design, features and functionality
- ➔ The degree of **value** the finished product delivers to **customers**
- ➔ The degree of **value** the finished product delivers to **end users** (not always the same as customers)
- ➔ The degree of **value** the finished product delivers to the **business** (meaning return on their investment)
- ➔ The team's ability to meet established **sprint or launch deadlines**
- ➔ Staying within the established **project budget**
- ➔ The team's ability to properly **design, implement, integrate** and **support** all required and/or requested **functionality**

A gentleman by the name of Michael Porter wrote the book — both figuratively and literally — on competitive strategy. In a widely-cited piece for the *Harvard Business Review*, titled *What Is Strategy?* he explains two crucial reason why

tradeoffs are so very essential to business strategy:

1. Tradeoffs **create the need** for **choice**.
2. Tradeoffs **purposefully limit** what's offered.

Pay attention to the two most important words there: “**purposefully limit.**” These aren't *deficiencies*; we're not talking about things that are lacking or missing in some way. What Porter is talking about are thoughtful, purposeful decisions to *limit* a feature set — in order to focus on delivering what matters most.

In other words, Porter is advocating for **Constraints**. And constraints are very different from **limitations**. Let's talk for a minute about the difference between the two.

Both constraints and limitations are boundaries. But they're not the same *kind* of boundary. A limit defines what's *possible*; a constraint defines what's *appropriate*. Here's what I mean:

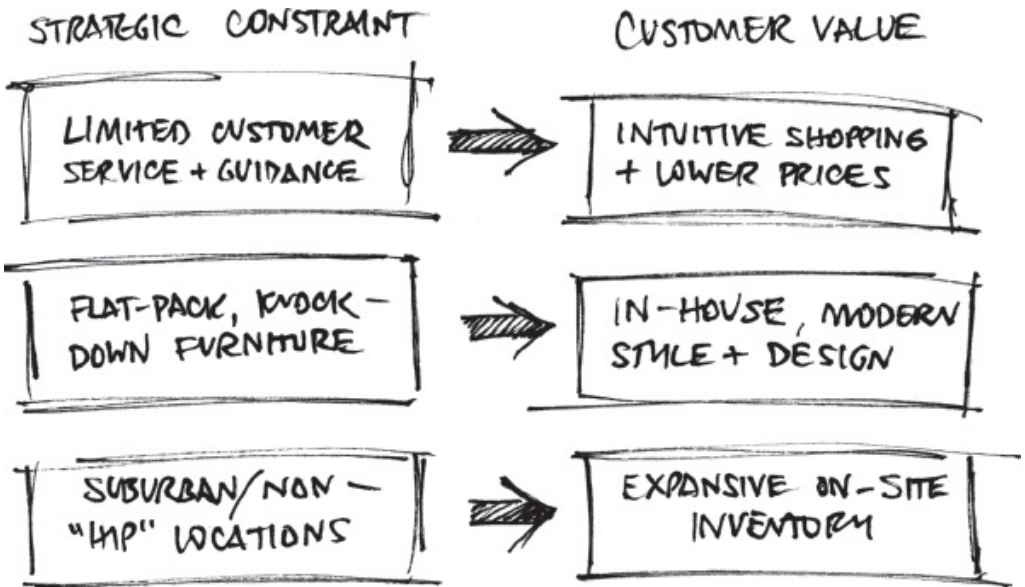
- ➔ If someone tells you that the new web portal **must** be coded using .NET and only .NET, that's a **limitation**.
- ➔ If that same person tells you the platform is **your choice**, as long as it supports a user-friendly Content Management System (CMS), that's a **constraint**.

Simply put, a constraint *frames context*. It's a guide that shows you how to strategize and design within the context of what's appropriate. Constraints are often seen as limits, but they are really an **invitation to innovate**. Tradeoffs that make *smart strategic sense* are born from constraints; they are *purposefully* designed into the process.

## Tradeoff Case Study: IKEA

In his article, Michael Porter makes an example of the blue and yellow behemoth who brought modern design to every bachelor pad in America: IKEA. Why? Because IKEA has built a successful business model on some very purposeful tradeoffs, born from very purposeful constraints, producing very positive results for both the company and its customers.

**IKEA owns the value loop like very few organizations can**, and that has allowed them to focus on the most valuable part of their business: their customers. By way of example, here are three of IKEA's strategic tradeoffs:



Let's look at each of those tradeoffs in more detail:

- 1. IKEA limits customer service, but delivers intuitive shopping and low prices.** When you go into the store, there aren't a lot of employees to guide or assist you. It's a very DIY experience. You walk through the store, you write down what you want, and then you go pick it out yourself.

By the numbers, fewer employees in the store is smart: it lowers their overhead. That lowered overhead means they can charge

less for their products, which obviously benefits customers. And, because they're asking customers to pick out their own stuff, they realize the shopping experience has to be that much more simple, intuitive and easy. They have purposefully designed it to be so: everything has a numeric code attached to it. All you do is write down the code, and then find it in the aisles. The signage is clear and the wayfinding is simple.

- 2. IKEA doesn't carry anything that comes pre-assembled.** IKEA has what is known as flat-pack or knock-down furniture. But again, it's a purposeful tradeoff: they've given up pre-assembled stuff, and they've given up doing the assembly as well. Because the company doesn't bear the cost of assembling the product — and a host of other costs associated with personnel, equipment, electricity, etc. — prices can remain low and consistent.

Every IKEA product is warehoused right in the store; it doesn't have to be sourced from anywhere, so it's always available. And since the products have a very modern style, this constraint has enabled IKEA products to be just what they are. Whether flat-pack or knock-down, they answer a customer desire: well-designed, functional, cool furniture at affordable prices.

- 3. IKEA stores are located in suburban locations.** Their stores aren't located downtown or in the hip/trendy neighborhood heart of things. The locations they choose allow them to provide a huge on-site inventory. Everything is at your fingertips as a customer: it's all there. You don't have to go anywhere else because the store itself is the warehouse.

These are all very purposeful tradeoffs, born from a clear understanding of what the business needs, what people want and what's *possible*. IKEA has given up things in some areas to realize gains in others. All the while making sure those decisions equal *better value* for customers.

Scoping a project, determining feature set and priority, is no different. You

have to make the same kinds of strategic tradeoffs described here. You have to figure out what you and customers need to **gain**, and think hard about what you have to **give up** in order to realize those gains. And then, of course, you have to determine whether the result is worth the sacrifice.

## Product Evolution: the *Long Wow*

Approaching project scope from a strategic standpoint also means defining product evolution:

- ➔ How will the product **change, evolve** and **grow** over time?
- ➔ How do we make sure it remains **relevant** to people?

In UX & marketing circles, what needs to happen is referred to as the **Long Wow**. To my knowledge, the term was first coined in 2007 by Brandon Schauer, now CEO of Adaptive Path. In an article titled (what else) *The Long Wow*, he explains:

*“The process is a means to achieving long-term customer loyalty through systematically impressing your customers again and again. Going a step beyond just measuring loyalty, the Long Wow is an experience-centric approach to fostering and creating it.”*

Essentially, as the product is used more and more over time, the Long Wow should provide new experiences, recurring delight, recurring surprise and recurring **“WOW, I didn’t know it could do that!”**

This isn’t a set-it-and-forget-it proposition; it’s a *continual evolution*. It means additions, modifications and the relentless quest for improvement. In the world of software, sites and systems, we’re all familiar with the concept of progressive releases with new or improved features. The software, systems and apps we use are constantly updated (whether we want it or not).



The Long Wow transcends digital, however: **it's a cycle of increasing expectation that's embedded in *everything* that we humans do.** We expect progressive, continuous value over the life of just about everything that we use.

And, with the proliferation of mobile devices at our beck and call, that level of expectation has grown exponentially. Most of us have very little tolerance for things that don't meet our expectations, because we know there are infinite alternatives at our fingertips.

Here's a quick example of how a strategic misstep in the release cycle can cause users and customers to abandon a product.

Pick any app on your mobile phone, and you'll find that there's an **interaction pattern** for how an item is deleted. There's a flow of actions and results that you've become used to, that you expect, when you want to delete something. A dialog window for example, appears consistently with the same message, the same standard buttons and labels, e.g. DELETE.

The **first time** you saw the pattern, you had to learn it. All you do now, however, is **do it**. Habit and reflex have taken over; no conscious thought required. That's because you already *know* the pattern. It's always in the same place, the controls look the same every time and respond to your actions in the same way. Tap, tap, **done**.

And if other apps on your phone follow the same pattern, your efficiency increases. The pattern is the same even though it's a different app, so **you don't have to stop and think**.

But when a new upgrade comes out and the pattern changes, or other new apps use a **completely different pattern**, it all grinds to a

halt.

You have to start over.

The speed and dexterity gained is gone, because you now have to stop and examine the new pattern and think, “*Am I doing this correctly?*”

The more variance in the established pattern, the more work your brain has to do... *just to figure out what to do*. The brain is good at recognizing that something's different from what it already knows, even if it can't specifically identify the difference.

The point here is that *any difference*, visual or otherwise, forces the brain to **re-evaluate** how the pattern works.

This is enough to motivate someone to start looking for another app that works the way they expect it to. And when that happens, loyalty — and customers — are lost.

When interactions and outcomes become consistent (and predictable), people only have to learn the controls and patterns once — and then employ them without much active thinking. This allows them to concentrate on the **task at hand**.

Which, if you think about it, is the primary reason they're using your product in the first place :-)

## Anatomy of a Long Wow Experience

Part of planning a Long Wow experience means thinking through your incremental releases and updates. Not just **what** you're going to change, but **why** you're going to change it, and how much **value** will be derived from that

change. And, like the preceding example, you also want to think through any possible disruption you might introduce — and whether the value gained is worth pissing a few people off. Strategic tradeoffs, remember?

The goal then, with product design of any kind, is to systematically serve and impress customers — again, again, and again. We're trying to create a succession of successes, all of which lead to an increasing sense of accomplishment or achievement.

Nowhere is this approach applied or proven more consistently than in the world of smartphone apps and games. Let's talk a little about how the Long Wow creates successful products in that realm.

## Motivation and Mastery

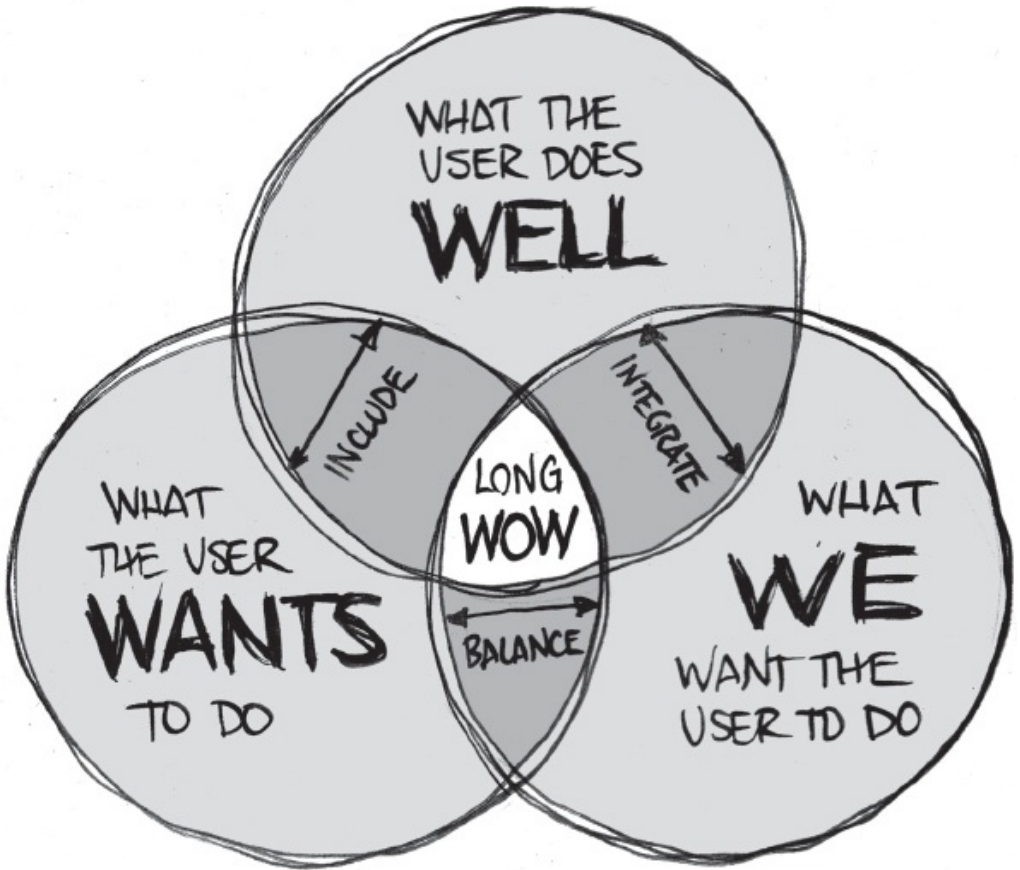
The Long Wow in an apps — particularly a gaming app — comes from **mastery**, which is linked to **motivation**. Gaming apps in particular put a user on the motivating path of mastery — beat the next level, find the hidden bonuses, explore entirely new worlds and scenarios.

Daniel Pink's *Drive* pointed out that **intrinsic motivation** — the joys that are a natural part of an activity — matters more to us than external factors, e.g. do this to get my boss (or doctor or girlfriend or wife) off my back. And while short-term motivation can spur a download or a purchase (*“learn this software if you want to keep your job”*), it fades away just as quickly.

For passionate users, the intrinsic motivation that drives them doesn't come from learning to do something, or making something they already do easier. It's also not about saving money via special deals or coupons or contests.

Instead, what matters most to the majority of app users is **growing their competence**. Getting progressively *better* at something. The experience they're after is a deft balance of what they do well and what they want to do better.

And lest we forget about the business end of UX, the experience also has to integrate what we (or the client) wants the user to do. That balancing act looks something like this:



Adapted from *The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior*, Edward L. Deci & Richard M. Ryan, 2009

In her excellent book *Badass: Making Users Awesome*, Kathy Sierra does a great job explaining why that intrinsic motivation is the key to long-term product success. And although she doesn't use the term Long Wow, that is most definitely what she's talking about. Companies, in Kathy's opinion, focus too much on the tool, and not enough on **how the tool helps users advance**

**their skills** (and themselves). In other words, they don't spend nearly enough time on context of use.

A camera, for example, is a tool. *Becoming a better photographer*, however, is the larger contextual goal — and the key to lasting motivation.

A camera app with a lot of features is great, and may be initially attractive. But if that same app actually helps the user to become better at photography, continually increasing their knowledge or competence or ability over the life of using the app, you've got a loyal user (and repeat customer).

## Repeated, Recognized Reward

So the Long Wow, in this case, is making sure that a continuous, evolving system of **repeated reward** is designed into the experience. Reward that's internalized and felt and acknowledged by the person using the product. Otherwise, popularity fades.

*Angry Birds*, for example, took the gaming world by storm and was one of the most successful apps in history. But the fanfare died down just as quickly when new releases of the game failed to deliver anything new and remarkable to users. Subsequent editions didn't offer any new challenges, new ways to increase skills, new opportunities for mastery.

**Once mastery is achieved, the brain is looking for the next challenge.** It's the same reason bright students often perform poorly in classes that don't challenge their intellect: their perception is that there's nothing to be learned that they don't already know. When challenges appear in the context of increasing mastery, people stick around. If it's too easy, doesn't move them closer to a goal or doesn't deliver the desired result, they start looking for something new.

Take a look at the iTunes app store or Google Play and you'll find that the majority of apps are designed to **reward continuous use**. For health and wellness apps, continued use over time delivers real, tangible benefits that are

physically experienced. Productivity apps deliver repeated value with use by helping someone become more organized, more productive, or maybe just a little less forgetful. Creative apps allow people to develop creative talents in a context they're already physically and emotionally connected to (smartphone/tablet use).

And the result of action taken in the context of motivation is *fun*.

## What “Fun” Really Means

This intrinsic motivation we're talking about is also what makes using well-designed apps or games fun. Game designer Raph Koster wrote a seminal article called *An Atomic Theory of Fun Game Design*, in which he essentially says that fun from games is tied to the idea of mastery. From solving puzzles to avoiding challenging obstacles to shooting zombies, games provide challenges that produce feelings of accomplishment. Of progress. Of increasing mastery.

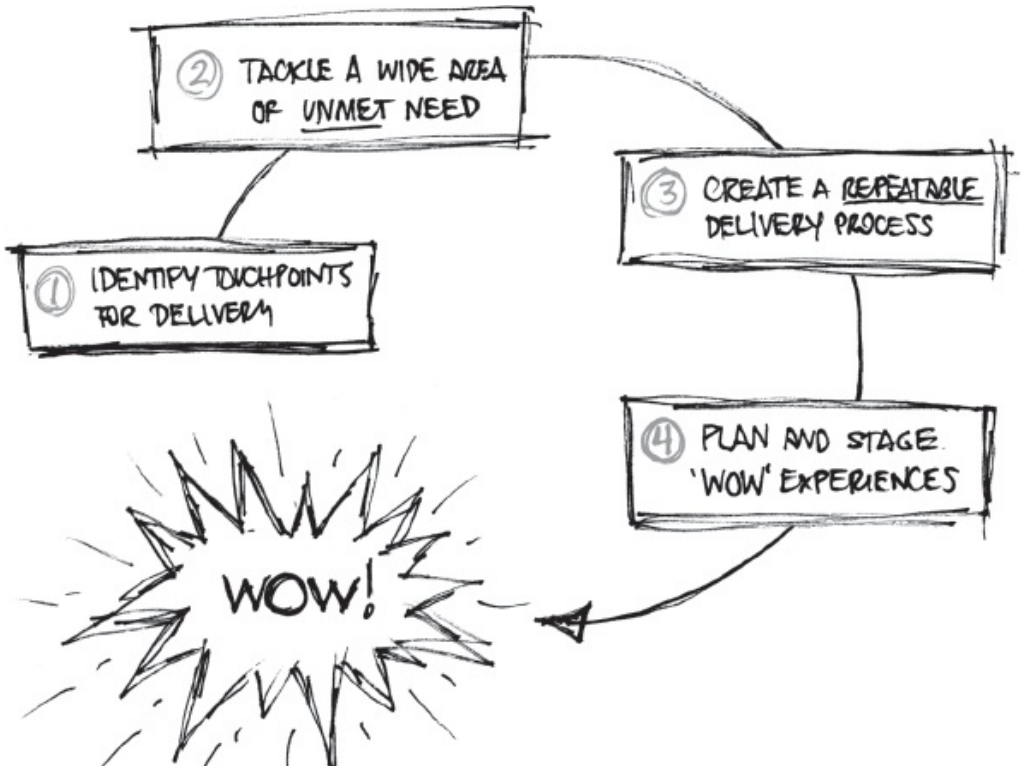
Make all of this happen continuously over time with each release, and guess what? You've designed a Long Wow experience.

Motivation isn't magic; it's a purposeful component of strategic UX design. It's something you should be thinking about from the moment you have an idea for a product, from the moment the client says “*we need to...*” The Long Wow of intrinsic motivation comes from taking the time to figure out how interactions, feedback and new options or features can walk hand-in-hand with the user's underlying goal of getting *better* at something.

Any and all variety in flow, interaction or functionality in each new release should serve the goal of delivering a continual sense of achievement. Everything else is secondary.

## Planning a Long Wow Experience

Brandon Schauer's article posited **four basic steps** to creating a Long Wow experience, and they hold absolutely true nearly a decade later. It looks like this:



Here's how it works:

### 1. Identify touchpoints for delivery.

The first thing you have to do is identify how to deliver your experiences. To who? Where? What experiences can or should be combined to deliver that WOW in the context of achievement?

Start by selecting a small set of touchpoints across channels that can be (1) **coordinated** to meet a specific need, and (2) **remixed** in a way to deliver new solutions as you come up with them.

Wearables like the Fitbit, for example, utilize three touchpoints:

- ➔ The wearable **device** itself.
- ➔ The **smartphone** you pair it with.
- ➔ The **website** you use to manage both.

Fitbit chose these touchpoints to deliver three ways for you to interact with the product. Because of this multi-faceted approach, the experience of using the device transcends any **single event**. Fitbit started by asking the essential questions: How (and how often) are we going to engage people? What are the points of contact and interaction? These are the touchpoints you need to think about as you design.

## 2. Tackle a wide area of unmet need.

Next, you have to find where the customer experience is lacking. What things have been overlooked? Where is the greatest potential to discover or deliver something truly new? Here's a hint: this will typically be something that you're **passionate** about. And it's also something that you should have some kind of competitive advantage with — meaning you understand it or can deliver it better than anyone else.

Your chosen area should be something that you feel like you can return to **repeatedly** to keep adding new insight, new features and new experiences. It should be a space where there is abundant opportunity for motivation and mastery. It may be an opportunity to identify an altogether new space, or it may be an opportunity to **reinvent an old space** that everyone else is neglecting.

## 3. Create a repeatable delivery process.

The third step is developing the ability to repeat the WOW on a continuous, **consistent** basis. Start with the strengths you already have, which may be a simple matter of cost versus benefit. Or superior product quality. Or a very thorough understanding of what



motivates your audience.

You take those things and blend them with research, prototyping, product design, and/or interactive design. You focus on those experiences that give you a clear idea of what's *possible* and *achievable*. What's important is that your focus remains on the **impact** of the experiences over time. What will people gain competence with over time? How will fresh, meaningful challenges be designed, implemented and sustained?

Keep your focus here, as opposed to the tool itself; usability of the interface or the physical design of the device. It's all about the experience, about how each update makes people **feel**: are they getting the WOW, the *newness*, the sense of accomplishment, with each release?

Creating and evolving a repeatable process means you have to know — and be able to *show* — how the experience brings something **meaningful** and **motivating** to the user's life. It has to be painfully clear where the WOW happens and how you're going to make sure it keeps happening.

#### 4. Plan and stage your wow experiences.

Understand that you're not going to be able to develop all of your ideas at once. In fact, there's a lot of inherent risk in attempting to do so — because for starters, it's extremely difficult to do. None of us can accurately predict the future, so purposeful, incremental iteration is the key to figuring out what works and what's realistic.

You need to plan the **intervals** between releases appropriately, so you have time to measure user reaction. Watch how people use what you've given them. Pay attention to what they tell you is under-performing or missing altogether. People might tell you what's good, but they'll *definitely* tell you what's bad. And while the bad is always harder to hear, it's where the most valuable information, insight and understanding come to light.

Your task at this point? Organize a **pipeline of possible WOW moments** that can be introduced through your touchpoints over the long haul. As you continue to learn more about your customers — how they perceive those WOW moments and what their larger goals are — both your pipeline *and* your ideas will change. They will evolve and develop further.

Doing the work now, outlining where and when those additional experiences will emerge in the future allows you to plan and coordinate the resources necessary to implement them.

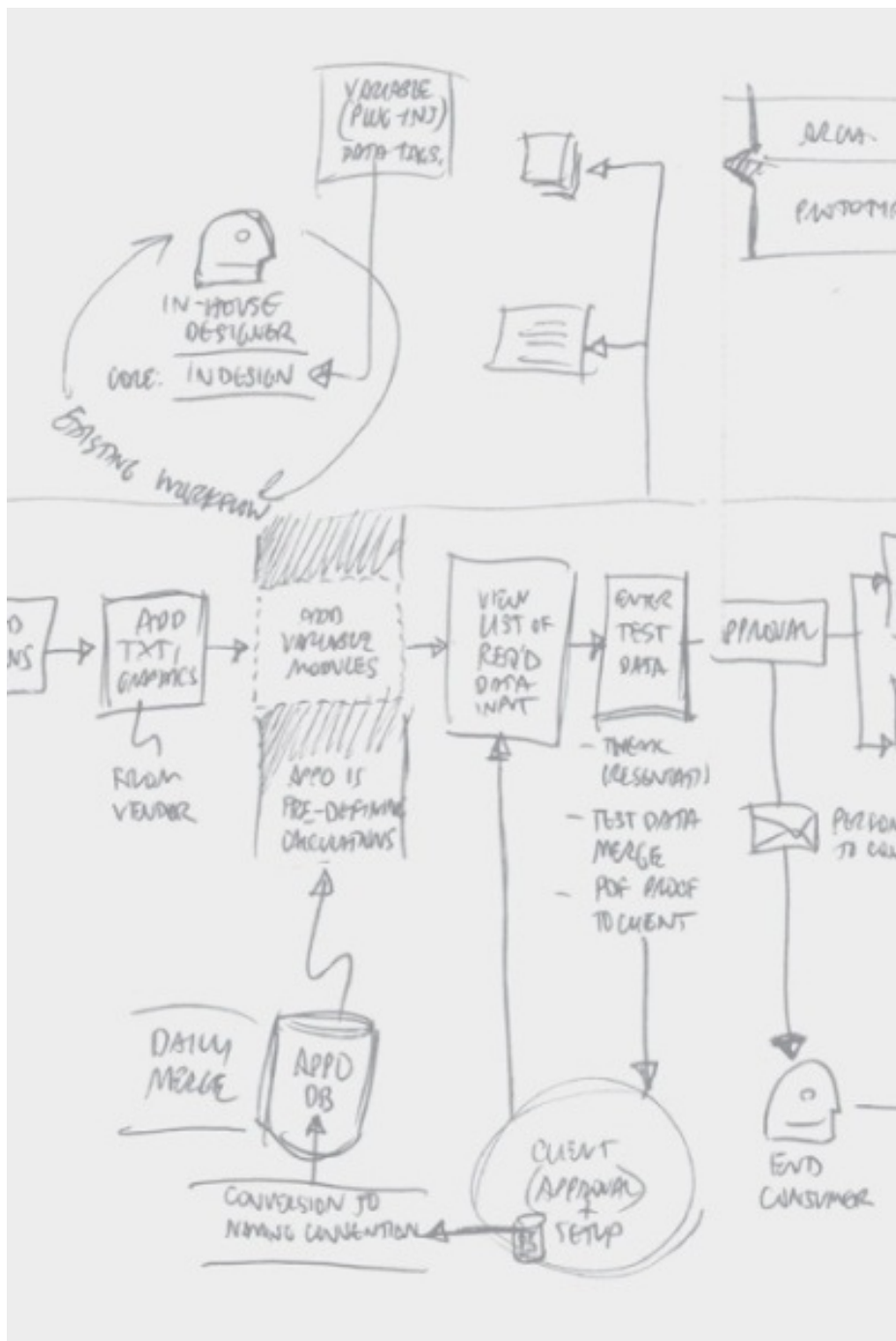
You may not get it exactly right the first time, or even the third or fourth time, but you will be on a path that serves the greater goals that motivate people to use things.

A large part of delighting customers means introducing the right thing at the right time. As the saying goes, timing is everything.

But that's only half the story.

**The other half is you.** You, continuously working to test your assumptions and make sure that what you're giving people truly has **intrinsic value** that continues to build over time.

# **Requirements: A Better Way**



**We started this journey by asking why we're doing any of this. Now it's time to ask *what*: What exactly are we going to do?**

In terms of design and development, a product's feature set — what we've all agreed we're going to design and build — is defined by *functional requirements*.

The more complexity we have, the more requirements we need. The more features we decide to implement, the more specificity we need for how those features should be designed and implemented. In other words, there are more questions to be asked.

If your task is redesigning an existing product, your primary source of requirements will be the **people** that are using it now. For a new product, a target audience with specific needs that will be met by the new product will play that role. But remember the UX value loop: user experience isn't just about users.

Requirements and specifications will also come from the **stakeholders** we met earlier in this book. Not only do they (hopefully) know their business and what needs to be provided in order to satisfy their customers, they have a *big* stake in the outcome. They understand what needs to happen in order for the organization to get some return on their investment in the project.

So once again, you'll need to visit *both sides* of the value loop in order to determine requirements for features and functions. You'll use all the data, research and analysis you have thus far to begin generating requirements. And those requirements fall into three essential categories.

- ➡ There are things people **say** they need.
- ➡ Then there are things that they **actually** need.

➡ And then finally, there are things that they **don't know** they need.

## What People Say They Need

Ask any group of people what they want or need and you'll get no shortage of answers. Brainstorming sessions with concerned participants will result in a great number of new approaches and angles — and opinions will surface quickly.

Even in a “think big” situation where participants are encouraged to ignore all limitations, a lot of what comes up will be solid. You may very well decide to keep and implement several of the concepts discussed. But the majority of them will never make it past those initial sessions. That's normal, because not every idea is actually *possible*. You may not have the time, the technical expertise, the budget or the right people with the right skill sets to pull them off.

But you need to be hyper-critical of that first set of ideas. The reason, according to neuroscience expert Dr. Susan Weinschenk, is because we humans, no matter how smart or well-informed we may be, have a very common flaw:

**We often make very confident — but equally *false* — predictions about our future behavior.**

**Imagining** how you'd use something isn't the same as **actually** using it. And because the imagining part is easy, it's seductive to think that our perceptions of use are indeed reality. But it's just not true. Spend five minutes in a usability lab and I guarantee you will see, quite clearly, just how *enormous* the gap between perceived and actual use really is.

Without actual use, you're just speculating, *guessing* at how it might be used. The thorough understanding that only comes with repeated use is missing at

this stage.

What's more, **our preferences are subject to our emotions**, which makes them a bit unstable and/or unreliable. How we feel about something is easily affected by the kind of day we're having. And we are certainly influenced by all of our experiences up to that point (related or not).

You know the old phrase "*don't knock it until you try it?*" The instability I'm describing is the reason that phrase exists.

The bottom line is that you don't really *know* if something is useful, valuable, relevant or positive until you actually **use it** and experience a **result** of that use.

In those initial "Think Big" sessions, you're really asking people to either **remember** past use or **speculate** on future use. Either way, there's no solid precedent specific to *this* set of tools, features, circumstances and possible outcomes. There's nothing to lean on other than a loosely educated guess about what *might* happen. So you must remember:

**What people say they need isn't always what they *really* need.**

**What people say they'll do isn't always what they *actually* do.**

So while you should absolutely consider all these generative ideas that come up in the beginning of a process, you should do so with more than a couple pounds of salt.

## **What People *Actually* Need**

We've established that every idea expressed isn't necessarily a good idea. But while these things may not make into the final feature set, they can often be a stepping stone of sorts to the next level of features: things people actually need.

When we have trouble with something, imagining solutions to solve the problem is easy, almost effortless. Many of you will be familiar with the term “solution jumping,” which is what happens when people start suggesting solutions before they’re even sure what the problem is. We’re good at it, so we do it often.

The problem with solution jumping is that it almost always addresses a **symptom** instead of the underlying problem. At the same time, that symptom is still the right place to start. Your task now is to *qualify* it, to play it forward and uncover the other actions, processes and motivations *attached* to it.

You may start out on a path that’s a little wobbly, but that doesn’t mean you’re going to stay there. The way you get past the wobble is by investigating further:

- ➔ Have we looked **beyond the tool** itself? Do we really understand what users expect to be able to do, how they need to be able to do it and why that matters to them?
- ➔ Do we have any **evidence** that tells us this requirement solves a recurring problem that’s affecting use or adoption?
- ➔ Is there **research** we can lean on to provide insight? Or is there more we need to know about users, expectation and motivation?

It’s both important and worthwhile to go through that exercise and to have those long drawn out discussions, no matter how pointless they can sometimes seem. Unless you go through the process of exploring all the parts related to what the user is doing, you’ll never have a clear picture of what they (and the business) really need.

## What People *Don’t Know* They Need



One of my favorite quotes is from Harvard Marketing Professor Ted Lovett, which goes like this:

*“People don’t want quarter inch drills. They want quarter inch **holes.**”*

Do you get that? What it means is that the **desired outcome**, what they’re using the tool to do, is infinitely more important than the **chosen tool**.

When conversations are focused on clarifying what people expect the outcome to be — instead of a very narrow focus on features, functions, and product attributes — you’re more likely to come up with better, more relevant solutions. You’re more likely to uncover things that no one realized were a problem until now. You’ll also likely discover that those things are causing at least a dozen other issues which, up until now, you thought were completely unrelated.

This isn’t as easy as it sounds, mind you. Our natural tendency is to look at a mechanism for doing something first. Mainly because when problems arise, we look around for a way to get the job done *now*; we think about **convenience** first. That’s human nature and it’s hardwired in our brains.

So if I need to drill a quarter inch hole, I’m going to use **whatever does that easily and quickly**.

If I’m in the basement and my drill is in the garage upstairs, I may very well take the Phillips-head screwdriver in my pocket and poke a hole in the wall. Because it just happens to be about a quarter inch in diameter, and it’s here with me. Convenience, in this case, trumps best practice.

Otherwise, I have to stop what I’m doing, walk upstairs, get the drill out of the cabinet, find a quarter-inch drill bit... which could be *anywhere* since I never put it back in the same place... insert the bit... punch a guide hole... you get the picture.

The bottom line is that we shouldn’t be talking about the drill at all. Or its

features. Or its functions. What we should be talking about is threefold:

1. The **problem** that people are facing
2. What their **desired outcome** is
3. What they're **most likely to do** to solve it — with or *without* your specific product!

Forget the product, forget the attributes, forget the specs. Focus on the *desired outcome* and the problem at hand.

## Creating Useful Requirements with Use Scenarios

There are any number of formalized ways to go about generating requirements, and every discipline has it's own version. If you talk to IT folks, you'll get one story. If you talk to designers, you'll get another story, another process, and another stair-step list of things that have to be done. Agile folks have their own methodology for going about that.

But for my money, if you're looking for a really simple, bottom line way to figure out what the requirements need to be (and which matter most), you create what we call **use scenarios**.

The reason I *love* use scenarios and apply them religiously is because when people see something, they ask questions. The **visual conversation** fuels the verbal conversation. There are all sorts of *ancillary* things that can happen in a scenario — and in day-to-day reality — that don't necessarily get accounted for when we're strictly looking at form, feature, and function.

Over the past 26 years it's been my experience that without this process, those things are never surfaced, discussed or addressed. Which also means they're never agreed upon.

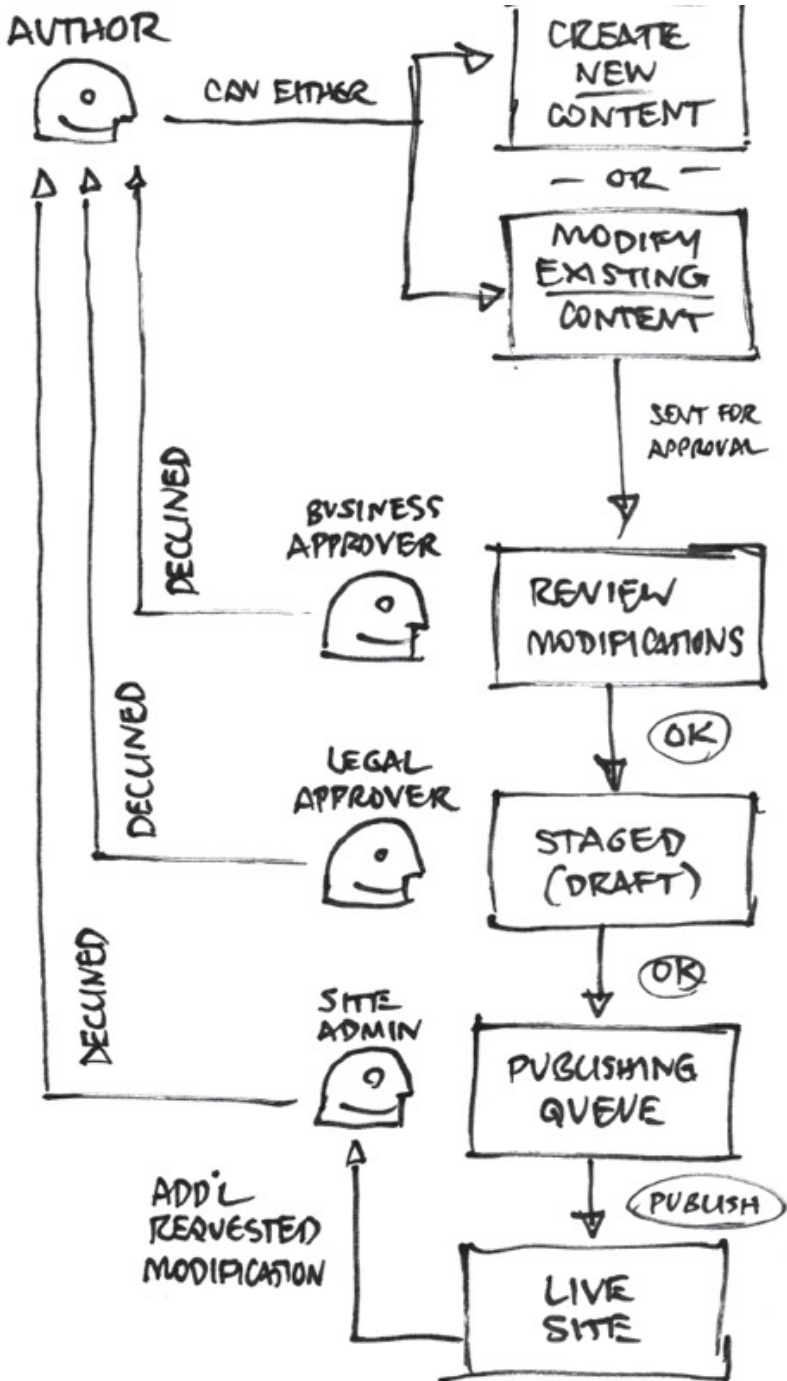
A use scenario is a short, simple narrative that describes how someone might

go about trying to fulfill a specific need:

- ➡ Sarah wants to save products to **different gift lists** for family members.
- ➡ Bob needs to be able to compare **service rates, delivery options** and **support contract terms**.
- ➡ Jill needs to be able to **add events** on the website to her **Outlook calendar**.

Whatever it may be, you start with the person doing the work. Define what their specific **role** is, what their specific **needs** are and what they're trying to **accomplish**. Use scenarios focus squarely on *context*, on real-world situations that people will find themselves in that relate to your particular product.

Here's an example of what my use scenarios look like:



This use scenario came from a discussion about publishing workflow for a content management system. What I do in these situations is simply ask the client to **walk me through the process** verbally.

As they talk, I draw people, boxes, and arrows on a whiteboard (or on paper) that describe what happens. I'm going to walk you through this diagram and give you some examples of how something this simple can uncover important technical requirements.

The client says to me *“we'll have multiple **authors**, each of whom can either **create** new content, or **modify** existing content.”* In return, I ask, *“Do the authors have access to all content, or only their own?”* The answer that comes back is *“well, they should only have access to their own content, but we're short-staffed, so there will be times when we'll need them to work on someone else's content.”*

Several requirements that come from that simple exchange, which I also write on the whiteboard:

- ➡ System has to support multiple users (1 - N)
- ➡ Each user needs an individual system role and ID
- ➡ Default access should be restricted to content they create
- ➡ Need an admin role above them who can easily and quickly allow other authors to access their content
- ➡ Authors will likely need a WYSIWYG editor
- ➡ Authors will need discrete action to submit content for approval

Then, they explain to me that once an author creates or modifies a piece of content, there are **two people who have to approve it** before it can be published.

First, a **business approver** in a specific department reviews the content. If it needs modification, she *declines* it, which means it goes back to the author who has to modify the existing content. If she *approves* the content, it goes further on down the chain to a legal approver, who can either decline or accept the content. If declined, it goes back to the author. If approved, it goes to the site admin, who is responsible for publishing it.

Here are the requirements that come from this exchange:

- ➔ Two specific “approval” user roles (with unique ID) needed; second role only sees content if the first rejects it
- ➔ Each “approval” user needs to receive notification that content is ready and requires their review and approval
- ➔ Each “approval” user needs a way to view the content at various stages
- ➔ Each “approval” user needs to be able to accept or reject the content
- ➔ The next “approval” user in the chain should be automatically notified when content is approved (triggered notification) by the previous approver
- ➔ “Site Admin” role with absolute publishing privileges is needed
- ➔ “Site Admin” will need to be able to approve or reject content for technical reasons

- ➡ Authors should be automatically notified as to whether content is approved or rejected (triggered notification)

I'm going to stop there, because I think our point is made. The client has only told me two very simple things thus far, and yet I have **more than a dozen requirements**. That's how this works. And that's how it *should* work; otherwise you're picking requirements out of the air, based on what you've done in the past or on what you believe should happen.

What's more, requirements don't just happen once: they can and should come from *every single conversation* you have with users and stakeholders.

Each one of the people in my diagram needs the ability to **see** information, and they need to be able to **act on it** in any number of ways. All it takes to figure that out is a very straightforward, simple conversation and someone like you drawing it out in the room with boxes and arrows.

Forget formal use cases, forget formal diagramming methodologies and rules. Just draw it out and label **who the players are** and **what they're doing!**

Page 129 shows another example of what a use scenario looks like. You'll notice that there is a core path of action and result, along with notes that describe what's happening, problems that occur and related questions.

It's not any more complicated than this. You draw, and you ask questions about each step, each decision point, each action:

- ➡ What happens here?
- ➡ What happens next?
- ➡ What can the next person in the process *do* with what they have?

It's a very simple way of getting a baseline for what gets **created**, what gets **acted upon**, and how it all moves through any particular **process**. We're focusing on the people, we're focusing on the roles at hand and we're focusing on how they do what they do every day.

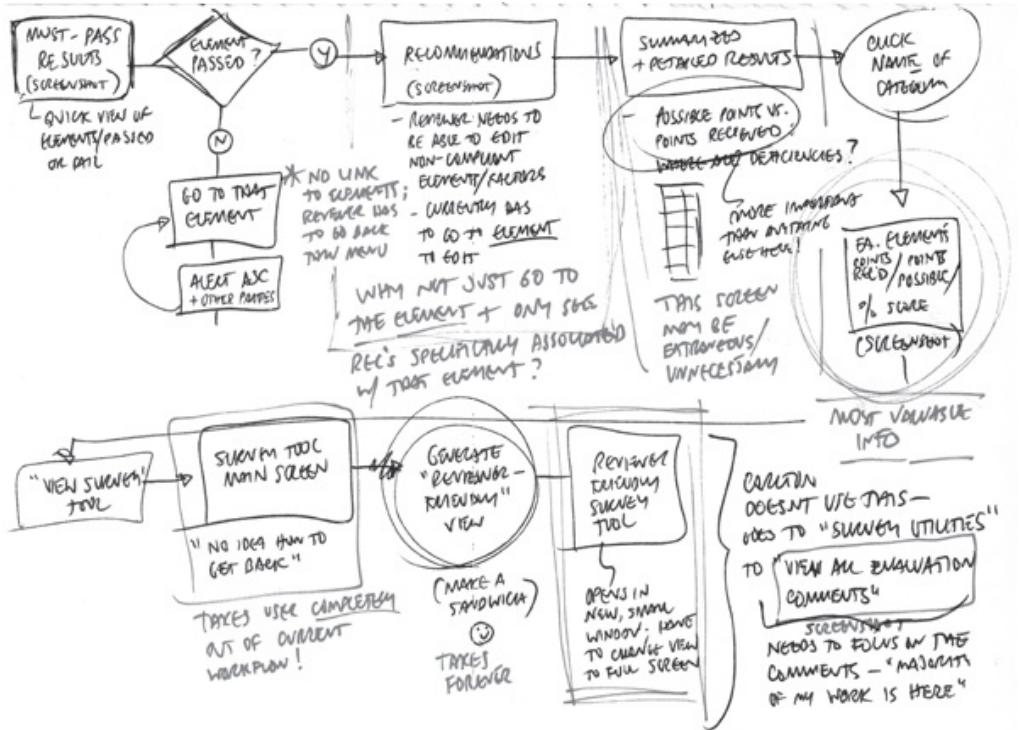
In a scenario, you're also considering what each person's **goals** are. For example, if you have someone who is approving all this content, one of their primary goals may be to know, at a single glance, what the status of any given piece of content is: who wrote it, where it is in the approval process, etc. They need the ability to keep all the details straight. Prioritize multiple reviews. They may need to create communications with other approvers, or with authors, to keep misunderstanding to a minimum.

Above all else, they may be praying for a tool that helps them **stay calm** in the face of angry authors and looming deadlines.

My point here is there are all sorts of **ancillary** things that can happen in a scenario — and in day-to-day reality — that don't necessarily get accounted for when we're strictly looking at form, feature, and function.

Always remember: use is all about human beings, and human beings are *complex*. There isn't always a straight line between what we do and what we want to happen. As such, commit the following axiom of user-centered design to memory:





**Task completion, in and of itself, does *not* equal success.**

The only time a tool, workflow or process is successful is when it meets all the primary *and* ancillary needs of all the folks who are involved at every stage.

## What About Use Cases and User Stories?

Kim Goodwin's *Designing for the Digital Age* does an excellent job of explaining why use cases and user stories don't provide much in the way of UX-focused requirements. So I will paraphrase her here.

Use cases and user stories, Goodwin says, don't consider or incorporate **how users feel about a feature or interaction**, nor do they investigate why a particular interaction or behavior provides a **better experience** for the user.

Use cases and user stories focus on **roles** as opposed to personas: they design for *Jane the Bank Teller*.

In the use scenario work I just described, we're designing for *Jane the stressed-out bank teller who typically has a line of 10 impatient people at any given time and who desperately needs a way to navigate the system in half the time or automate complex, lengthy transaction sequences*.

## Look Beyond Tasks and Activities

Good UX has to address a lot more than tasks and activities. For Jane, getting customers through the line and completing their transactions is **task completion**; she's already doing that now.

Doing this same task *better* — in a way that is more accurate, efficient and makes customers feel like the process was painless, pleasant and *really* fast — is **success**.

In our scenario a few pages back, the authors and approvers need to do the tactical things required of them, but they also want to be able to *keep track of it all* without losing their minds.

They want to know for sure that the next person in the chain has been notified so they don't have to badger them.

They want to be able to report status to their boss anytime s/he asks so they appear to be on top of things.

Those things, which fall *outside* the mechanical tasks of writing and reading content, are what constitute success.

*"I want to look good to my boss"* won't usually make it to most requirements lists, but it certainly *should*. Because if that doesn't happen, that person doesn't get what they need. And if they don't get what they need, neither does

anyone else in the entire workflow. The system doesn't save the company the time or money they expected it to.

And that, my friends, is failure.

## Making Use Scenarios Contextual with Personas

Remember the goofy little heads I drew in the diagram? Those are the people using what we're designing here, and as I think you know by now, your most critical task is to understand them. What they need to do, why they're motivated to do it and how they expect things to happen.

One of the ways you make this picture clearer is by creating a **persona** for each user.

There are plenty of prescriptions for persona creation, but they're all essentially the same: laundry lists that suggest it's possible to understand a person's motivation — and create an accurate, useful user persona — simply by checking boxes and asking questions related to behavior.

This is not that, because *that*, in my experience, doesn't *work*.

So instead, I'm going to give you a simple, practical process and two companion templates that will put you on the path to creating user personas that deliver real value to your design approach. I'm going to show you the best way I know to get a true understanding of a user that is formed by the messy realities of what it's like to be human.

There are two key steps in this process:

- 1. First, you have to understand the person's context and develop empathy for them.** Empathy goes far beyond demographics, likes, dislikes, job roles and responsibilities. Empathy is about understanding the emotional drivers that affect

the user's behavior, because **emotion will trump intellect** in almost every situation users find themselves in. Design for the emotion and you're truly designing for a person instead of a collection of possible attributes.

- 2. Next, you have to uncover that person's behavioral attributes and motivations, in the context of multiple situations.** What has the person just done or just finished doing when they encounter your product (site, app, tool)? What are they thinking and feeling at that moment, and how does that affect what they see and how they act? What **stress** is present in that situation, and how does it affect the person's perception and action?

## Persona Creation Happens Immediately

I want to be clear that I explore both of the areas noted above *before* any face-time with users. *Before* I read any usage data the client has for me. *Before* I hear from stakeholders what people are having trouble with or are complaining about.

The minute you have any of that input, **your perception of who that user is** has been **irrevocably tainted**.

That's not your fault; it's how your brain is designed to work. Once you have those conversations, you will have predetermined ideas about what situations people find themselves in and what causes them to perceive things or act in a certain way. You are no longer objective and you will be **fighting against what you know** for the remainder of the project.

And because of that, any user personas you create will be a lot less valuable to you than they could (or should) be.

So this is work I do at the outset of the project, before any discussions or interactions with users occur. The only things I typically know about the prospective users at this point are the following (which come from client

stakeholders):

- ➔ Their **job title** (B2B)
- ➔ Their basic **day-to-day responsibilities** (B2B)
- ➔ How they use the product **now**
- ➔ What **other products** they use in conjunction
- ➔ How the Client *thinks* they use the product
- ➔ What **features** or functions the Client *thinks* may be important to them

These serve as draft personas whose details will be filled in once I do start having those conversations and interviews. The idea is to start unbiased and then fill in the missing pieces. Working this way also allows what you learn about emotion and situations to illuminate the facts you find later during the interview process.

What you already know will shine a light on what you hear, enabling you to clarify the connections between cause and effect.

There are two primary tools I use for this process. Both are adapted from the work of Nikki Knox, a Design & Education strategist at Cooper. She introduced empathy mapping as a simple workshop activity performed with stakeholders (or anyone responsible for product development) in order to build empathy for end users. Nikki shared her approach in an article for UX magazine titled *How to Use Persona Empathy Mapping*.

What follows are two tools that have proven to be infinitely valuable to me in terms of increasing the realism and accuracy of user motivations.

The first tool is called an **Empathy Mapping Template**. It's meant to help you establish empathy for the user and map their perceptions, pressures, influences, beliefs and goals.

The second tool is called a **Situation Mapping Template**. It's meant to help you explore all the possible situations in which the product or tool is being used, which often reveals ways in which existing or possible features become more or less useful or desirable according to what's happening at the time.

Combining both will give you a remarkably accurate sketch of a user persona whose motivations will most definitely affect your feature, function, UX and UI design decisions. These templates are available for download at [givegoodux.com/resources](http://givegoodux.com/resources).

## The Empathy Mapping Template

This template is meant to help you consider how other people think, and what they feel as a result. Its purpose is to help you take a step back from focusing on user behaviors and focus on their **emotions** and **experiences** instead. The next page shows you what this template looks like.

Start by thinking about the **sensory experiences** of the person across the six areas of the template, and write down what comes to mind as you do. Ask yourself the following questions and get down what comes to mind — remember, this is exploration, so you do **not** have to be right.

- ➡ **What does s/he likely believe?** What does s/he worry about?
  
- ➡ **Where does s/he work?** In what ways do you think that environment influences decisions or constrains the ability to act?

# Think First

<p><b>1</b></p> <p><b>THOUGHTS &amp; EMOTIONS:</b> Beliefs, convictions, motivations, worries &amp; goals.</p>	<p><b>2</b></p> <p><b>ENVIRONMENT:</b> How is s/he affected by workplace, social settings, similar products/services?</p>
<p><b>3</b></p> <p><b>SOCIAL INFLUENCE:</b> Who does s/he listen to most? Friends? Bosses? Co-workers? Outside influencers?</p>	<p><b>4</b></p> <p><b>BEHAVIOR:</b> How s/he acts, and how s/he wants to be seen and thought of; In the workplace and public spaces.</p>
<p><b>5</b></p> <p><b>PAIN:</b> Fears, frustrations and perceived obstacles.</p>	<p><b>6</b></p> <p><b>GAIN:</b> Wants, needs and what s/he believes constitutes success.</p>

- ➔ **From a social perspective, who influences how s/he thinks** or what s/he does – bosses or coworkers? Friends? Family?
- ➔ **How does s/he want to be thought of and “seen” at work or in public?** What image is sh/e trying to project across social media?
- ➔ **What fears and frustrations does s/he likely have,** and what typical obstacles to success might be present?
- ➔ **What does s/he want, need or believe** to be success?

Again, these are inferred guesses, and that’s OK. You will get closer to reality

and throw out the things that don't apply later on in the project.

Right now the only thing that needs to happen is for you to get your brain into the purposeful habit of trying to put yourself into that person's heart and mind.

Just go – think, write and examine. You may use multiple sheets for the same person, and you may find that coming back to your work a day or two after the fact helps you see it more clearly. Don't be afraid to experiment.

## The Situation Mapping Template

The situation mapping template is used to get closer to the specific situations this user might find themselves. It helps you to begin mapping connections between situational factors and needs that arise as a result.

Situational awareness, for example, is extremely important in the manufacturing industry. Workers on the shop floor now spend a significant portion of their shift working with computers — and touchscreen user interfaces — that allow them to do their jobs safely and effectively.

That means they constantly need to be aware of **what's happening** with the machine or the process, understand **what that information means to them** right now and be able to **predict what it will mean in the future**. So how they think, what they see, how they feel about it and what they do in response may determine not just their safety, but that of their co-workers too.

Situation mapping starts with describing the situation and the obstacle Jane, our user, is facing:

*“Jane, a 911 operator, has just taken a call from a woman who is crying hysterically and possibly hyperventilating. Jane cannot understand a word the woman is saying, and the caller is not listening to the questions Jane is asking about her situation and location.”*



Notice the **stress** inherent in the situation; this is important in painting a realistic picture, and helps you consider worst-case scenarios (which all design should account for).

Next, if the situation is part of a multi-step process, you describe that next step or phase. For example:

*“The first thing Jane is required to do is ascertain the caller’s location. She cannot dispatch any help to the woman until she gets this information”*

Again, note the urgency of the situation, and the obstacle Jane, our user, faces: **she cannot move to the next step in the process until something else has been done first.**

So if Jane is looking at a UI that’s meant to coach her through these situations, for example, there are some immediate questions that come to mind:

- ➔ What *information* does she need to access?
- ➔ How *quickly* does she need to see that this information exists?
- ➔ How quickly and easily does she need to be able to *access* it?
- ➔ How *relevant* does that information need to be to what she’s dealing with *right now* (e.g. a scripted dialogue meant to calm a caller)?

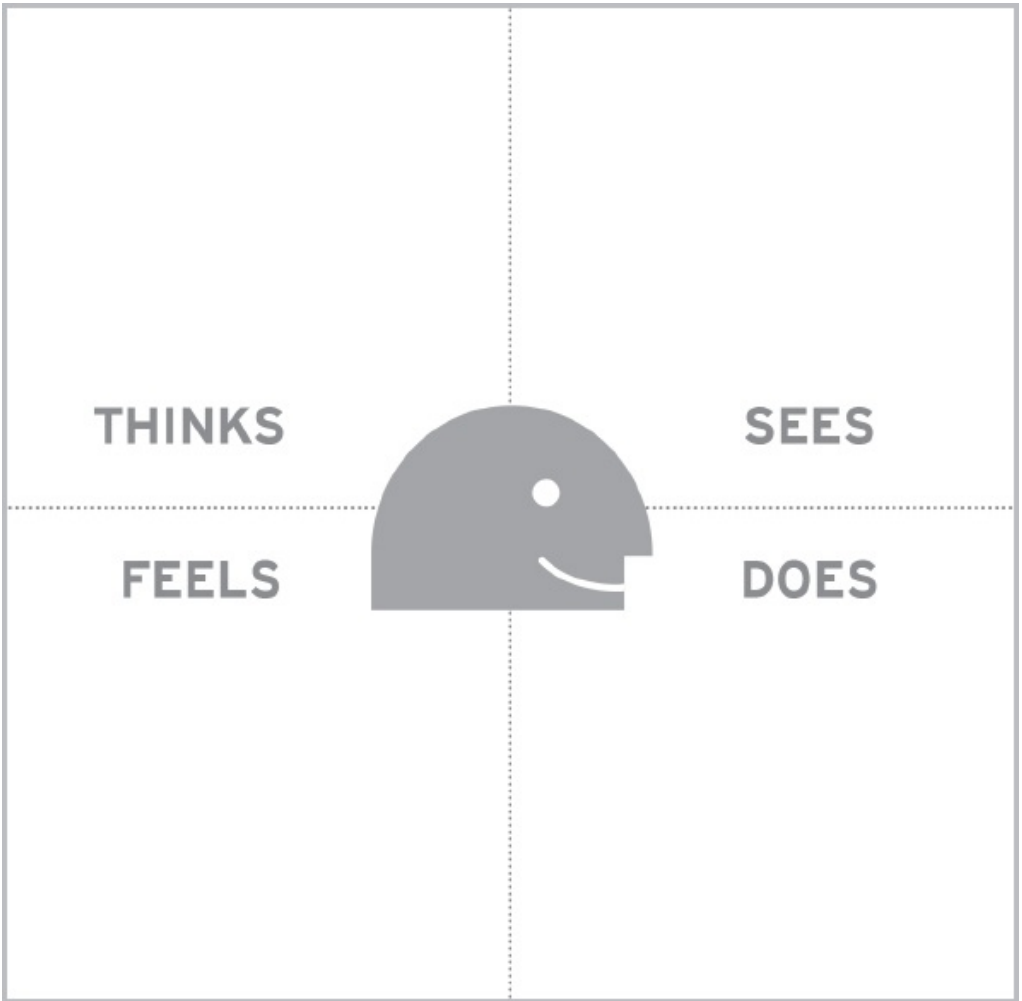
Remember that **all users operate under some level of stress.** Even if it’s *good* stress, there is still a goal to accomplish, a finite amount of time to do it in and any number of potential obstacles, both large and small.

## *Think First*

As such, whenever possible, you want to emphasize areas of stress and strain in your situations. Consider creating multiple **variations** of a situation, each with a different degree of urgency and stress. Work through each scenario, using the worksheet to guide your effort.

This makes the experience **visceral** for you and/or your team, and makes it easier to imagine how someone else might think and feel in a specific context.

Here's what the core part of the Situation Mapping Template looks like. During requirements sessions, notes and questions are captured across four categories specific to our persona:



You're trying to put yourself in Jane's place, and the way to do that is to ask these four questions:

- ➔ **What does she *think*?** What's foremost in her mind at this moment? Consider the thoughts that might be running through her mind, such as *How do I get this woman to calm down to I don't know what to do to OK Jane, stay calm.*

- ➔ **What does she *see*?** What information should be available to her onscreen? What might help her get control of this situation or speak to the stress she's experiencing or answer the questions she's thinking?
- ➔ **What does she *feel*?** What's her emotional state, and how can the system help her manage it? Again, we're designing for stress, and if Jane doesn't feel calm and in control, she'll have a hard time helping this caller.
- ➔ **What does she *do*?** What's the very first thing Jane needs to do or expects to be able to do? What's the first critical action she needs to take? In this scenario, Jane needs to get the woman's location, but she can't do that until she *calms the woman down*. So actions she can take toward doing that are of primary importance.

At first glance, these seem like very simple questions. But the simple act of asking them will prompt you to think through the scenario on a much deeper level.

That work, of developing empathy and establishing context, is the key to designing experiences that result in positive outcomes for all involved parties.

## When You Finish: Questions to Ask

When you work through both templates you should reach a point where you've exhausted potential scenarios and have a fairly clear picture of your user persona — along with her situational and emotional motivator.

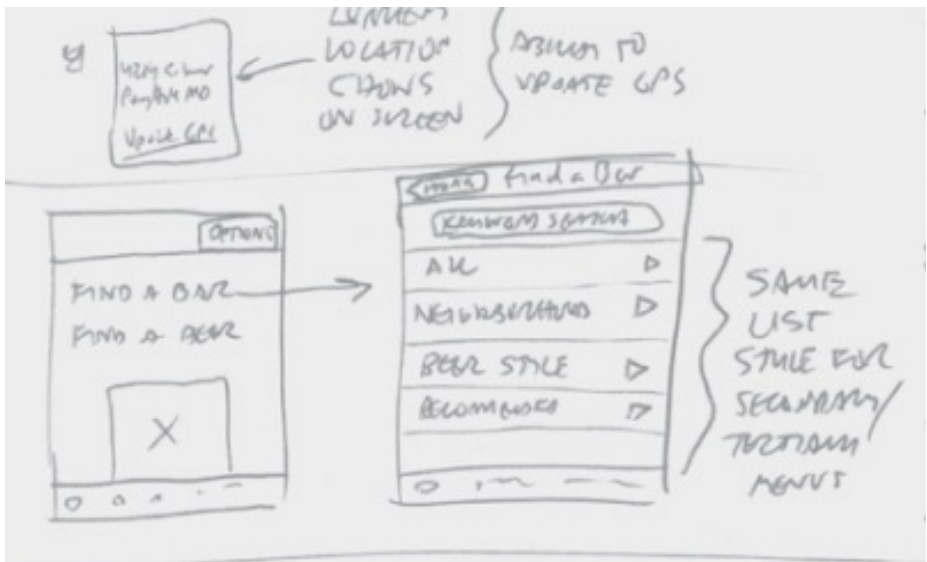
When you finish both templates, ask yourself some questions:

- ➔ What attributes or situational factors you uncovered are **unexpected?**

## Think First

- ➔ What aspects of your persona do you think you need to **learn more** about?
- ➔ What situation has the most **impact** on your proposed feature set?
- ➔ What situation has the most potential to deliver **real value** to your persona?
- ➔ What aspects of your persona or his/her situation will (or should) impact or influence your designs the *most*?

# **Putting it All Together**



**At this point, you've not only done a lot of work, you've done a lot of *thinking*.** I hope it's clear by now that this thinking is the *key* to the success of anything and everything you do related to product strategy, design or development.

*Think First* isn't just the title of this book; it's the underlying mantra driving everything I've said thus far.

When I work with my clients' design and development teams, I tell them that what we're doing together isn't about changing the tactical work they perform on a daily basis. Instead, it's about changing the way they **think** about that work.

When you make decisions from a conscious, UX-focused perspective, the work you deliver becomes infused with that perspective. All it takes is a willingness to take sixty seconds to consider how what you're doing might affect the user's experience, for better or worse. In doing so, you'll develop a habit of filtering even the smallest decisions by asking "*how will this affect UX?*"

Before I summarize the takeaways I'd like you to remember, there's one more thing that must be said. And it's this:

**Every single *force* that acts upon a project evolves that product's final feature set, form and function.**

Those forces may not all be obvious from the start; they rarely are. But rest assured, each and *every* decision you make will be affected by multiple factors, which are most likely (but certainly not limited to) the following:

➡ Audience expectations



- ➔ Client desires/fears
- ➔ Personal opinion/taste
- ➔ Cultural assumptions
- ➔ Political pressures
- ➔ Personal preferences
- ➔ Technology preferences
- ➔ Time
- ➔ Money
- ➔ Personnel

Every one of those forces has **significant impact** on whether you can or cannot include a given feature. They all have an impact on how well you will be able to define and design and develop that feature. So try not to get yourself locked into the vacuum of believing you know *exactly* what your requirements are and *exactly* how you'll design this thing.

You don't, and you shouldn't be expected to.

Yes, you've done a lot of hard work to figure out what matters, what stays and what goes. But don't believe for a *minute* that none of it will change between now and launch.

**Expect** that change. *Plan* on it. *Welcome* it.

Above all else, be patient, be flexible and remember that there is *always* more

than one right way to do something.

## Think First Takeaways

- 1. Anything that was ever worth doing started with a strategy.** If you have a strategy, that means you know what you're doing, who you're doing it for and why it matters — both to you and the people you expect to use the end result. Every feature, every function, every label, every interaction and every single element that winds up in the finished product should be a direct result of these two interrelated goals.
- 2. Strategy means putting people first.** Strategy means finding the sweet spots between what *users* want to make their lives easier and what the *business* needs to accomplish in order to prosper. It's about recognizing the gaps and the overlaps between those goals and thinking about how design can best serve both of these masters.

Never forget that you always have to serve someone on the product creation side. Remember that no value coming back to the business means a failed product — or a very short-lived one.

- 3. If you don't come up with a good solution to something, it's likely that you're solving the wrong problem.** The key to successful design is identifying the *right problems* to solve. Anything involving human beings is inherently messy; we can be very difficult to please, to say the very least.

So any problems related to our use of something are typically difficult.

If the problems you're examining are easy to solve, raise the red flag — because that's a sure sign you're on the *wrong path*.

- 4. Innovation is a balancing act.** Innovation starts with people, with *desirability*: you may well have a great idea, but does anybody want it? In addition to what people want, you also have to determine the *feasibility* of your idea. You have to figure out whether, given your current constraints, it's possible to create something that's really high quality.

And if that weren't enough, you also have to consider the *viability* of the product once it launches. Sustainable innovation only occurs when you're solid in *all three places* — desirability, feasibility and viability.

- 5. If you fail to plan, you're planning to fail.** Clear strategy determines the strength of the customer experience. It's what informs the technology decisions we make, the features we include and the way all of it is presented and delivered. Strategic outcomes should inform how navigation, controls and content are arranged.

When strategy isn't leveraged to determine appropriate design and functionality, the chances are very high that we've built something people don't want, won't be able to use or don't understand.

Remember, decisions that are made on the strategy plane of a UX project have a massive ripple effect all the way up the chain. So if you skimp on the strategy work or skip it altogether, you'll be paying for it repeatedly over the life of the project.

- 6. There's more than one way to research.** No matter how you go about getting the information and knowledge you don't currently possess, it's research. If you are looking for clues into what needs to happen to solve a problem, guess what? You are *researching*.

Research does not have to be a massive, academic undertaking or a formal, scientific approach to measuring variables and conducting complex experiments. You *do not* have to subscribe to,

or practice, any of the number of formalized approaches to UX, design or usability research.

The only thing you have to do is *do it*.

**7. Start with business objectives.** The core concern of any commercial entity is money. So each and every business goal relates back to either *making* money or *saving* money. So if you're serving a client (which in some cases may be yourself), your primary job as a Designer, UXer or Developer is to help these people either make money or save it.

**8. Move to users, and differentiate clearly between B2B and B2C.** You're looking to build a picture of what's going to meet their needs the best. And to do that you need information that goes beyond how they use something. You want to know why these tasks — and completing them in a certain way — is important. You want to know what they *expect* to accomplish and why it matters to them.

Throughout the process, remain focused on the *why*, the motivation, the *desired result*. Is accomplishing Task X going to make them look good to their boss? Is accomplishing Task Y going to save them time? Is accomplishing both X and Y going to make them richer? Taller? Better looking? Whatever it is, you need to know about it.

**9. Whether you're interviewing stakeholders or users, ask open-ended questions and listen more than you talk.** Your role here is not to solve problems or suggest solutions, it's to get unbiased information. So don't give them advice, don't try to push them one way or the other. Just let them answer the question and *listen*.

Open-ended questions often prompt silence, which allow people the necessary space to walk you through the answer.

So be patient; let the silence following the question do the heavy lifting, and repress the urge to fill it with your own voice.

- 10. You *must* ask the 3 crucial questions.** Whether you're building something from the ground up or redesigning an existing product, your marching orders are the same: You need to find out **what's worth doing**, have a shared understanding of **what you're creating** and be absolutely sure everyone understands (and agrees on) what **value it delivers**.
- 11. You *must* follow strategy with scope.** Defining scope forces everybody involved to see and address potential conflicts and rough spots, *before* time is invested in designing or building. Making sure every person has the *same understanding* of what you're building, and what it will take to do so, is critical.

The process of defining scope ensures that you identify all those things that have the potential to derail your progress, to derail the delivered *value* of the project or the product.

- 12. You *must* capture and share everything that gets agreed to.** Unless there is some common reference point that exists for everybody to refer back to as they're iterating, you will live in the land of perpetual beta. Or you will be stuck in an endless cycle of iterating and re-iterating.

A common understanding of features, schedules, and milestones puts the end squarely in sight. It gives everybody a common reference point, a shared understanding of *what we're after* and *how we're going to get there*.

Documentation does not (and in most cases *should* not) have to be a novel-length formal requirements or specification document. But you *must* document in some way, shape or form.

- 13. Make every tradeoff strategic.** Just like many of our strategic

decisions, tradeoffs are an *essential part* of scoping a product. Whether deciding what to offer or how much of it you will design or build at any given moment, you are making *tradeoffs*. You are weighing options and making choices accordingly. Be cognizant of the fact that each choice will almost always mean that you'll have to give up something else, somewhere else.

Remember that the *balance* between what you gain and what you lose determines the *value* of what people experience.

- 14. Take the time to think through and plan a “Long Wow” product evolution.** Approaching project scope from a strategic standpoint also means defining how the product will *change*, *evolve* and *grow* over time. It also means formulating a plan to ensure it remains relevant to people.

Over time, as people use the product, your Long Wow should provide new experiences, recurring delight, recurring surprise and recurring “*WOW, I didn't know it could do that!*”

- 15. What people say they need isn't the same as what they actually need.** And quite often, they *don't know* what they need. It's very easy for most of us to make predictions about what we would do or how we would use something — but those predictions are usually *false*. Why? Because *imagining* how you'd use something simply isn't the same as actually using it. So remember that what you hear is really just speculation; someone is *guessing* how they would use a particular thing.

You have to dig deeper to uncover what they really need. And you also need to consider the fact that there may be some things they haven't *thought of* that might be really useful and valuable.

- 16. Use scenarios are key to realistic, strategically valuable requirements.** Use scenarios enable you to generate critical requirements faster than any other process I have ever used. I've

been doing this for going on three decades now, and by and large, the vast majority of what I spend my time doing is creating use scenarios.

I've found that I get more valuable information from two hours of talking, of drawing boxes and arrows, than I've ever received from a typical eight-hour requirements session.

- 17. Task completion is *not* the same as success.** The only time a tool, workflow or process is successful is when it meets all the primary *and* ancillary needs of all the people who use the product.
- 18. Useful personas consider both empathetic and situational factors.** Empathy is about understanding the emotional drivers that affect a person's behavior, because emotion will trump intellect in almost every situation users find themselves in. When you design for the emotion, you're truly designing for a *person* — instead of a collection of *possible* attributes.

Make sure you explore that person's behavioral attributes in the context of multiple situations. And remember that some level of stress is always present in *every* situation.

- 19. Think first. Again and again and again. Repeatedly re-evaluate the work you're doing by putting yourself in the place of the people who will have to *use* what you create.** You have to constantly revisit all prior takeaways as the project progresses, even when you're well into coding.

As you move through planning, design, development, even testing, stop repeatedly to ask:

➔ Does everything we're doing still serve the *value proposition* that we established?

- ➔ Is it still something that's going to make people feel like it's a *worthwhile* use of their time?
- ➔ Is it still easy to use?
- ➔ Have we deviated anywhere?

You have to consistently and diligently go back and weigh what you're doing against all that's been uncovered, learned and discussed up to now.

The key to your success is the discipline to check, double-check and re-check, combined with a willingness to correct course when you're wrong.

**20. What's between your ears is infinitely more important than anything you can do with your hands.** The things that we all find memorable and exciting, the things we're willing to spend our time and money on, haven't really changed all that much throughout human history. The way we're wired as human beings is the key to how we perceive the things we experience.

And because of that the tactical things you do to design or build something don't matter nearly as much as what you're *thinking about* while you're doing those things. What makes you truly valuable as a UX designer or consultant is what's between your ears.

Cultivating that, learning the fundamental principles behind the things that motivate human beings, is (and will *always* be) your most important and most worthwhile endeavor.

## Now It's Your Turn

Since 1989, I've helped designers, developers and project teams create better



Customer and User Experiences. From strategy to features to functionality to UI design, my job is to help these organizations create differentiation and spur growth by making sure their digital products deliver the *right* experience.

**I am an extremely fortunate man.** The reason I've enjoyed a successful career is because, at *many* points along the way, people I looked up to and respected took time out of their very busy lives to answer an inordinate number of questions from yours truly.

At this point in my career, what matters most to me is paying that forward, sharing what works (and what doesn't) with all you brave souls out there trying to change the world.

*Think First* should give you a pretty clear picture of just how strategic the disciplines of User and Customer Experience are. Hopefully I've also shown you that **what you know** and **how you apply it** is infinitely more important than any formal methodology or process. Over the years I've adapted what I do, taking into account any number of established processes. I keep the parts that work, and I jettison the parts that don't.

I am ruthless about both.

All too often, the focus around User Experience Design and Customer Experience Strategy has been squarely on tactical methods and technology used. But it's the **strategic thinking** that really determines the quality and value of the interaction. It's also what makes you *valuable* to a client or an employer.

Product managers, engineers, developers and designers are all too often taught how to follow practices that are little more than paint-by-number exercises. They're taught to use technology to measure efficiency, without stopping to consider whether efficiency is *really* the problem.

Very few of us are ever explicitly taught how to create a compelling user or customer experience that delivers value to both user and creator. That's a

## *Think First*

problem, because – as most organizations have learned the hard way these last few years in particular – if you fail at the UX part, you fail. Period.

**Anyone can learn to deliver great user experiences.** Each and every one of you can add some measure of what I've talked about here to the work you're doing right now. All it takes is being mindful of the principles we've discussed, and allowing them to affect and inform your decisions.

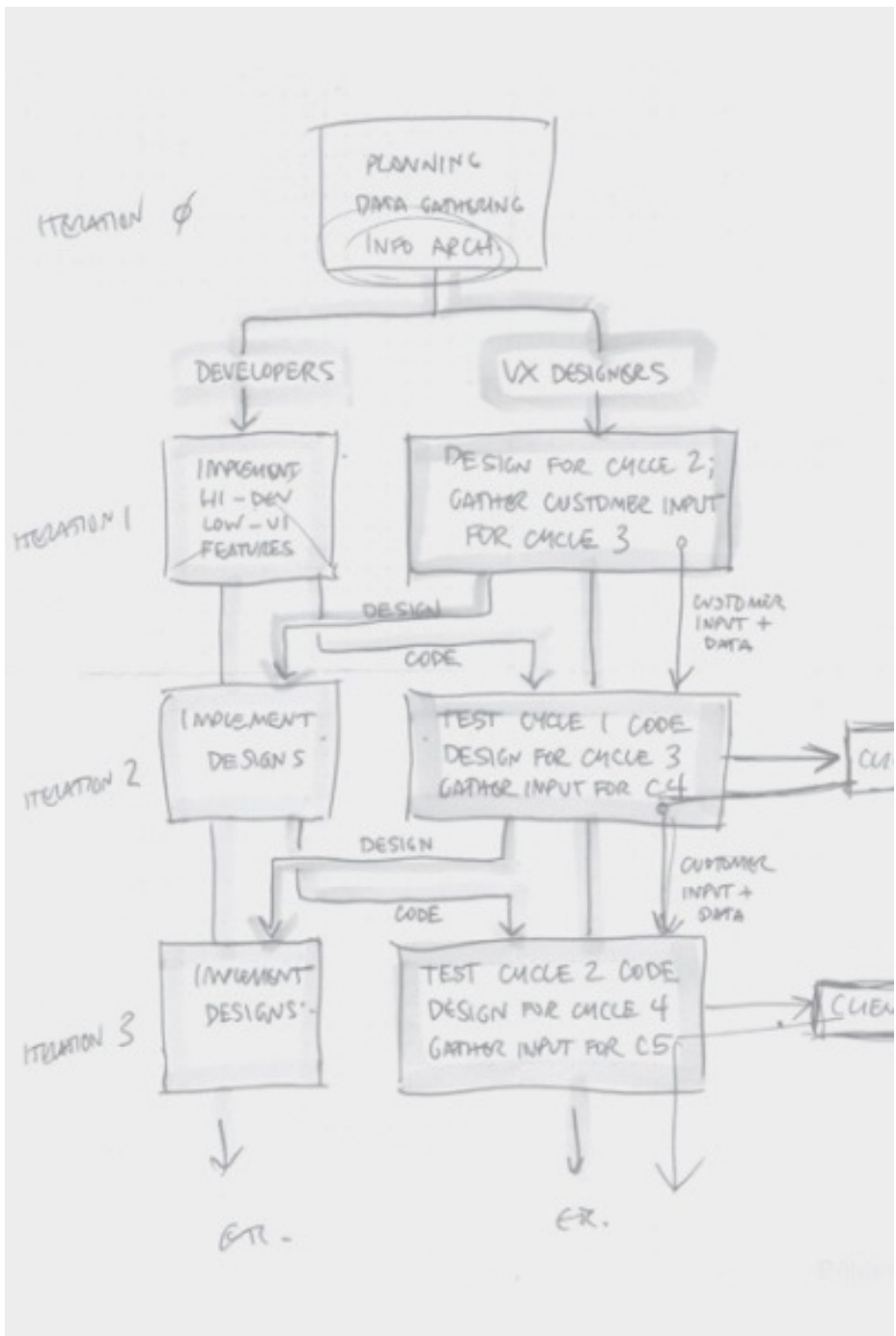
Think first. Design next.

I invite you to visit my website, **[givegoodux.com](http://givegoodux.com)** and take advantage of a wealth of free tips, templates and how-to articles to help you deliver useful, valuable experiences for your customers, clients or employers.

I wish you much success on the road ahead.

See you out there.

# **Without Whom...**



**If there's any wisdom to be found between the covers of this book, it's the direct result of 26 years of relentlessly studying the work and wisdom of those who came before.** Aside from the benefit of experience, so much of what I've learned has been gained from countless magazines, blog articles, seminars, books, tweets, email conversations and the like.

The principles laid out in this book, along with the sketches you see, come from more than 100 notebooks (and loose papers and the backs of business cards and napkins and...) full of notes and scribbles. I made them whenever and wherever I heard something that stopped me in my tracks and made me think “*yeah, that's it EXACTLY.*” The size of my ‘swipe’ file, as it's called, grows exponentially every week, much to the chagrin of my wife.

I cannot possibly overestimate the value all of this captured reference information has provided to me over the last two and a half decades, and I owe a great debt to their originators I will never be able to repay.

I highly suggest you do the same. If you read something here that makes you stop and think “*YES!! That's it exactly!*” make a note. Write it down. Snap a pic with your phone. The method doesn't matter. But capture it, keep it and refer to it often.

I've always been an information sponge — I'll read anything, anywhere, anytime. I've sat in doctors offices where the only reading material was *Woman's Day* or the like — and without fail I'd pick it up and dive in. I still do that.

Insight is everywhere; all you have to do is look.

For example, how about this little thing we call the Internet? We are incredibly

fortunate to live in a time where so many are willing to share their experiences so openly and honestly.

There is much to learn and again, it's safe to say that a great deal of what I practice today is born from absorbing all of this on a daily basis. From the honest admission that there will *always* be something I don't know. From a steadfast commitment to never stop learning.

When you have that stuff available in your noggin, you'll call it up and apply it when the situation arises almost unconsciously. It's kind of like finding a \$20 bill in a pair of pants you haven't worn in 3 months. What an incredible, incredible gift.

**So I'd be lying if I said every idea, method or process in this book is mine and mine alone.** That credit must be shared with countless other UX and business professionals whose books, blogs and workshops have provided timeless principles, practices and wisdom. We are all constantly learning (and borrowing) from each other. Regardless, I strongly suggest you seek out these (and other) sources and apply the wisdom you find.

Because it's nearly impossible for me to figure out what I've learned from who from my notebooks, I thought I could at least list some of the people and sources **without whom I would never have been able to get this far.**

I owe all of them a great debt, and I will apologize now if anything I've said here is a little too close to the source for comfort.

I assure you, it's absolutely not intentional.

## ARTICLES

*I've mentioned a number of influential and enlightening articles throughout the book, but there are a few others I didn't reference that have been influential for me as well. Each of these, along with the overall body of work of each author, is absolutely, positively worth your time.*

### **10 Most Common Misconceptions About User Experience Design**

*Whitney Hess*

<http://on.mash.to/1pRMv12> ▶

---

### **What is Strategy?**

*Michael Porter*

<http://bit.ly/1HuMxol> ▶

---

### **The Long WOW**

*Brandon Schauer*

<http://bit.ly/1MrKnLm> ▶

---

### **The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior**

*Edward L. Deci and Richard M. Ryan*

<http://bit.ly/1CUxpTM> ▶

---

### **An Atomic Theory of Fun For Game Design**

*Raph Koster*

<http://bit.ly/1DBXvFH> ▶

---

## **The Marketing Imagination**

*Theodore Levitt*

<http://bit.ly/1LBAvPk> ▶

---

## **How to Use Persona Empathy Mapping**

*Nikki Knox*

<http://bit.ly/1em3oA1> ▶

---

## **Thirteen Tenets Of User Experience**

*Robert Hoekman Jr*

<http://bit.ly/1VFkgE0> ▶

---

## **Rethinking Design Thinking**

*Dr. Don Norman*

<http://bit.ly/1KoyQtc> ▶



## BOOKS

*I've read the books that follow cover to cover, and I spend a great deal of time in libraries and bookstores in a continuous effort to learn more. I take the approach that there will always be something I don't know and something I can learn from other people's experiences.*

*The sheer volume of brilliant writing and insight on the topics of UX, Design and business strategy is fairly staggering. But taking the time to check them out is how you expand both your understanding of both obstacles and opportunities related to good UX. Read. Often. At every possible opportunity.*

### **The Elements of User Experience: User-Centered Design for the Web and Beyond (2nd Edition)**

*Jesse James Garrett*

.....

### **Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability (3rd Edition)**

*Steve Krug*

.....

### **The Design of Everyday Things: Revised and Expanded Edition**

*Dr. Don Norman*

.....

### **Emotional Design: Why We Love (or Hate) Everyday Things**

*Dr. Don Norman*

.....

### **Universal Principles of Design: 125 Ways to Enhance Usability, Influence**

**Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design**

*William Lidwell*

---

**A Project Guide to UX Design: For User Experience Designers in the Field or in the Making (2nd Edition)**

*Russ Unger*

---

**About Face 3: The Essentials of Interaction Design**

*Alan Cooper*

---

**Intertwined: Information Changes Everything**

*Peter Morville*

---

**Information Architecture for the World Wide Web: Designing Large-Scale Web Sites, 3rd Edition**

*Peter Morville & Louis Rosenfeld*

---

**Stop Pushing Me Around! A Workplace Guide for the Timid, Shy and Less Assertive**

*Ilise Benun*

---

**The Designer's Guide To Marketing And Pricing: How To Win Clients And What To Charge Them**

*Ilise Benun*

---

**Mobile User Experience: Patterns to Make Sense of it All**

*Adrian Mendoza*

---

**Sketching User Experiences: Getting the Design Right and the Right Design**

*Bill Buxton*

---

**Design Thinking: Integrating Innovation, Customer Experience, and Brand Value**

*Thomas Lockwood*

---

**The Ten Principles Behind Great Customer Experiences**

*Matt Watkinson*

---

**The User Experience Team of One: A Research and Design Survival Guide**

*Leah Buley*

---

**It's Our Research: Getting Stakeholder Buy-in for User Experience Research Projects**

*Tomer Sharon*

---

**Interviewing Users: How to Uncover Compelling Insights**

*Steve Portigal*

---

**Designing Multi-Device Experiences: An Ecosystem Approach to User Experiences across Devices**

*Michal Levin*

**Designing for the Digital Age: How to Create Human-Centered Products and Services**

*Kim Goodwin*

---

**The UX Book: Process and Guidelines for Ensuring a Quality User Experience**

*Rex Hartson*

---

**Observing the User Experience, Second Edition: A Practitioner's Guide to User Research**

*Elizabeth Goodman*

---

**UX for Lean Startups: Faster, Smarter User Experience Research and Design**

*Laura Klein*

---

**100 Things Every Designer Needs to Know About People**

*Dr. Susan Weinschenk*

---

**100 MORE Things Every Designer Needs to Know About People**

*Dr. Susan Weinschenk*

---

**The Cluetrain Manifesto: The End of Business as Usual**

*Rick Levine*

---

**Designing Web Usability**

*Jakob Nielsen*

.....

**Do You Matter? How Great Design Will Make People Love Your Company**

*Robert Brunner*

.....

**Getting Real: The Smarter, Faster, Easier Way to Build a Successful Web Application**

*Jason Fried*

.....

**Rework**

*Jason Fried*

.....

**Smashing UX Design: Foundations for Designing Online User Experiences**

*Jesmond Allen*

.....

**The Art of the Start 2.0: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything**

*Guy Kawasaki*

.....

**Rules For Revolutionaries: The Capitalist Manifesto for Creating and Marketing New Products and Services**

*Guy Kawasaki*

.....

**CTOs at Work (includes an interview with yours truly ;-)**

*Scott E. Donaldson*

**Designing Business: Multiple Media, Multiple Disciplines**

*Clement Mok*

---

**Writing and Research for Graphic Designers: A Designer's Manual to Strategic Communication and Presentation**

*Steven Heller*

---

**Badass: Making Users Awesome**

*Kathy Sierra*

---

**All Marketers Are Liars: The Underground Classic That Explains How Marketing Really Works — and Why Authenticity Is the Best Marketing of All**

*Seth Godin*

---

**The Dip: A Little Book That Teaches You When to Quit (and When to Stick)**

*Seth Godin*

---

**Permission Marketing: Turning Strangers into Friends and Friends into Customers**

*Seth Godin*

---

## WEBSITES

*The sheer volume of online generosity coming from UX practitioners is just incredible. Whatever you want to learn, whatever current challenge you're facing, I guarantee you can find insight and advice on any of the following sites.*

*The following list is composed of websites I visit on a weekly basis, with the most frequent listed first. As with books and articles, there is always something to be learned.*

### **Give Good UX** (naturally :-)

[givegoodux.com](http://givegoodux.com) ▶

.....

### **UX Magazine**

[uxmag.com](http://uxmag.com) ▶

.....

### **UX Mastery**

[uxmastery.com](http://uxmastery.com) ▶

.....

### **UX Matters**

[uxmatters.com](http://uxmatters.com) ▶

.....

### **UX Booth**

[uxbooth.com](http://uxbooth.com) ▶

.....

## **UX Movement**

[uxmovement.com](http://uxmovement.com) ▶

---

## **UX Matters**

[uxmatters.com](http://uxmatters.com) ▶

---

## **UX for the Masses**

[uxforthemasses.com](http://uxforthemasses.com) ▶

---

## **Putting People First (Experientia Blog)**

[experientia.com/blog](http://experientia.com/blog) ▶

---

## **Boxes and Arrows**

[boxesandarrows.com](http://boxesandarrows.com) ▶

---

## **Fast Company: Design**

[fastcodesign.com](http://fastcodesign.com) ▶

---

## **The Baymard Institute**

[baymard.com](http://baymard.com) ▶

---

## **Luke W(roblewski)**

[lukew.com](http://lukew.com) ▶

---

## **User Interface Engineering**



[uie.com](#) ▶

---

## **Designers and Books**

[designersandbooks.com](#) ▶

---

## **UXdesign.cc**

[uxdesign.cc](#) ▶

---

## **Keep It Usable Blog**

[keepitusable.com/blog/](#) ▶

---

## **Smashing Magazine**

[smashingmagazine.com](#) ▶

---

## **A List Apart**

[alistapart.com](#) ▶

---

## **Signal vs. Noise**

[signalvnoise.com](#) ▶

---

## **UXADAY**

[uxaday.com](#) ▶

---

## **52 Weeks of UX**

[52weeksofux.com](#) ▶

---

---

**Nielsen Norman Group**

[nngroup.com/articles/](http://nngroup.com/articles/) ▶

---

**Seth Godin's Blog**

[sethgodin.typepad.com](http://sethgodin.typepad.com) ▶

Get the UX insights I've shared with more than  
**30,000 students!**

## UX DESIGN FUNDAMENTALS

WITH JOE NATOLI

Everything you need to know  
to design great apps, websites and  
systems that people love using!



I created my **UX Design Fundamentals** class for one simple reason: most instruction available to people who want to learn more or start a career in UX is, well...*wrong*. Typically, these courses or programs focus on disparate, narrow parts of a design/development process. The problem is that UX isn't *part* of a process:

### **UX is the process.**

Great UX only happens when you look beyond what happens on the screen, beyond trends and technology and far beyond what people say they want or need. **UX Design Fundamentals** shows you where to look, how to make sense of what you find, and what to *do* with it.

For 1/5 of my hourly consulting rate, you get 12 hours of my time and 26 years of my expertise. **Everything you need to know about UX** — from theory to methods to how it *really* works in the real world — is here.

**"I feel like I'm learning more in Joe's course than in *all* 4 years of college."**

PAULO ORIONE, STUDENT

**"Great knowledge and insight!** Joe guides you with equal parts insight and humor, exposing things you may have never thought of."

CHITA HUNTER

**"A Fantastic Introduction to UX.** Joe does a great job breaking each section down into easily digestible parts, coupled with real-life examples that make it easier to understand and apply."

DUDLEY JOHN FOURNIER III

**"Pure excellence.** I'm sharing this knowledge with my team in order to get our product to the high level of quality we've been reaching for."

RYAN SAMSON

**"This was a real eye-opener for me!** I found my knowledge of user experience design didn't even scratch the surface of what Joe covers."

CAROL

**"Tremendous content; detailed and explained.** More information than I ever expected, well planned, great delivery. Joe's style is easy to listen to, and he makes complex and multi-layered subjects easy to understand. Many real life examples for discussion. Take this course!"

THERESA ANDRE

**"I feel like I've done tons of projects with this guy!** His approach is unique, like a buddy sharing his experiences, but yet so insightful."

ROSNER PARRALES

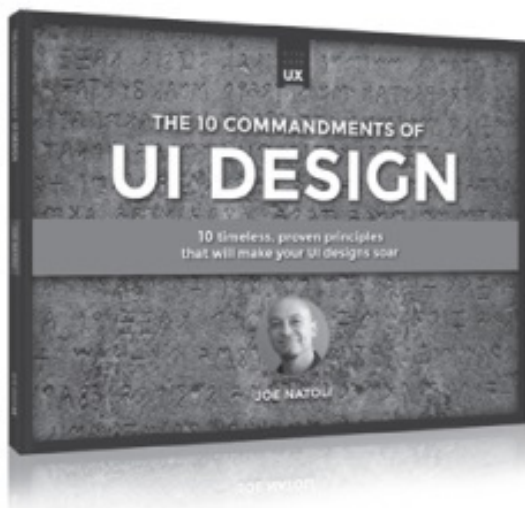
**Get started today.**

Preview the course, read reviews and more.

[udemy.com/user-experience-design-fundamentals](https://www.udemy.com/user-experience-design-fundamentals)



# The sure-fire way to create stellar UI design!



**What's the best way to design a great UI?** It's not what you think:

- ▶ It's not about having the coolest, latest technology.
- ▶ It's not about following the latest design trend.
- ▶ It's not even about colors, or graphics, or fonts.

The real secret is this: your UI design decisions have to reflect 10 timeless, proven principles that determine how people *perceive* what they see. Follow the secrets contained in the *10 Commandments of UI Design*, and you will create something that is infinitely more useful, usable and valuable.

## grab your FREE copy!

[givegoodux.com/free-ebook](http://givegoodux.com/free-ebook)




Pick My Brain | Consulting | Speaking | About | Contact

GIVE GOOD UX  
FOR NATURAL USER EXPERIENCE CONSULTING + COACHING

TIPS & ADVICE    USER EXPERIENCE    CUSTOMER EXPERIENCE    UI DESIGN
Search

TIPS & ADVICE

### How can a print designer break into UX?



This is a question I am asked several times a week, and it's a good one. It's also a hot-button here for me related to a myth I'd like to annihilate. A significant portion of the media — aided and supported by UIers in fear for their jobs — would have you believe that UX is an exclusive club that only those with the right talent and extensive training can join. It's not true.

In my opinion, every designer — whether we're talking print design or UI design — is a UX designer to some degree. Design as a discipline starts with visual communication, how visual things resonate with people, and how they interpret and act on what they see. If you're a designer of any kind, you already have much of what you need.


I started my career in 1989 as a print designer, and all I did when I moved to UI/UX a few years later was to apply the same principles of good design that I used to design in print. We didn't even call it UX then, by the way — the term didn't exist. Many of my colleagues and I were doing the same work we have all come to know as UX. We just called it design.

**Design is solving problems, not drawing pictures.**

At Kent State University, we were taught design as a

[more »](#)

GET YOUR FREE EBOOK



Sign up to receive my monthly UX tips, articles and tools via e-mail and get a **FREE** copy of my **NEW** e-book on the **30 Commandments of UI Design**. These 30 timeless, proven principles will show you how to create User Interfaces that are more useful, usable and easy to use.


Privacy Guarantee: I will never share your email address with anyone else.



SIGN UP + DOWNLOAD


TIPS & ADVICE

### 5 Rules for Better UX Interviews



If you're responsible for helping make a product reality, then it's also your responsibility to

ONLINE TRAINING



★★★★★ 93 reviews

22,000+ students enrolled!

SIGN UP NOW

"This course has a huge number of takeaways, resources, and added educational benefits. Whomever level of experience you currently have as a web designer or developer, this course unlocks and comprehensively answers the all-important questions: How can my website or my client's website get more exposure, get more traffic, and/or make more money?"

This course is essential and you should care about UX! If you really want to show off your results!

Udacity member

get UX tips, tricks, tools and insights

# givegoodux.com





# “passionate, engaging and *damn* insightful.”

ATTENDEE, DEVWEEK 2015 | LONDON UK



**I am never anything less than honored when selected to speak at an event. It's a responsibility I take very seriously.**

As an event planner, I know that you're placing a very large bet on my ability to engage your audience and deliver value. Your audience has taken time out of their busy lives to hear what I have to say.

So I owe it to you — and them — to deliver something that's entertaining, engaging, relevant and applicable. The kind of insights people can put to use the minute they get back to work.

The goals you have for your event are mine as well.

When you win, I do too.

**I'd love to speak at your next event. Please visit my speaking page to see me in action and learn more.**

[givegoodux.com/speaking](http://givegoodux.com/speaking)